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SECOND

# ANNUAL REPORT

ON THE CONDITION

OF THE

COMBINED SANITARY DISTRICT

OF

# WEST SUSSEX.

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BY

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# SECOND ANNUAL REPORT

ON THE

# Health of the Combined Sanitary District of West Sussex.

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## RURAL SANITARY DISTRICT OF STEYNING.

Population (1871) 14,060. Area in Acres 45,678.
No. of Houses (1871) 2659.

During the year 1875, the births of 438 children and the deaths of 230 persons were registered. Estimating the population in the middle of the year at 15,310 the birth-rate was 28·6, and the death-rate was 15 per 1000 per annum. In the United Kingdom the corresponding rates were 34 and 22 respectively during the year, so that in this district there was a considerable diminution below the average in births and deaths.

Two hundred and thirty-five boys and 203 girls were born; the males, as usual, preponderating over the females; on the other hand, more women than men died, the converse being usually the case.

The deaths from zymotic diseases or catching disorders were 27 in number, or about one-ninth of the whole number of deaths. These 27 deaths included five from diphtheria, seven from whooping-cough, four from fever, eight from diarrhœa, and three from erysipelas. The rate of mortality from these diseases was 1·7 per 1000; in England and Wales during the year, the average rate was 3·3, or just about double; in large towns the zymotic death-rate is much higher.

Of the five cases of diphtheria, one was brought into the district, the boy having caught the disorder at school; two died at Upper Beeding, one at Steyning, and one at Southwick. In each case, it appeared that the prevalence of north-east winds helped more to bring about the disorder than any defective sanitary conditions.

All the cases of whooping-cough died under two years of age, and these mostly occurred in delicate children who suffered from bronchitis or pneumonia, or some other chest affection.

The two cases of enteric fever proceeded from inhaling sewer gas from imperfect traps, while there were two other cases of fever of a doubtful nature.

Of the eight cases of diarrhœa, four occurred at Southwick and

two at Portslade-by-Sea; in each case bad nourishment and hot weather seemed to bring about the result.

It is worthy of notice that none of the deaths from the above causes occurred among paupers.

This district is divided into two parts by the South Downs; one portion lies to the north, the other occupies a nearly level ground between the Downs and the sea. The former is but thinly occupied, but it is more exposed to cold and north-east winds; the latter is much more thickly populated at Portslade, Southwick, and Kingston, but it is more sheltered. The latter places are also provided with good water from Shoreham Water-works. In the north district four of the five diphtheria cases occurred; in the south district only one was met with; the more exposed situation on the north side of the Downs may help to explain this. In 1874, as in 1875, this disorder appeared in a few cottages at Steyning and Upper Beeding, and these two places are just to the north of the chalk hills.

The death-rate in the northern district was about three per 1000 higher in 1875 than in the southern district; this was chiefly due to several aged people dying from old age or lung disease in the early part of the year, and those in the more exposed villages suffered the most. Whooping-cough was most prevalent in the northern portion, while diarrhœa was most frequently met with at Southwick and Portslade, places where there is a poor population and the people are not always as cleanly as could be desired.

Amongst the pauper population 422 persons were taken ill; of these, 10 died; measles and scarlet fever were nearly absent; one death was due to diarrhœa but no other death was attributed in this class to any of the common catching disorders. The annexed tables will sufficiently explain the causes of disease and the prevalence of the various disorders.

Steyning itself is a small town containing about 1700 inhabitants; at present the drainage is very defective, and a great portion of the sewage runs down a small stream which, bright and clear at one end of the village, is foul and offensive at the other end. This stream then runs away along some ditches until at length it flows into the river Adur. To remedy this state of matters, it has been determined to drain the town effectually and to cut off all the drainage from the stream. The new drains will only partially carry storm water in them and the outfall will be placed so that the effluent water can irrigate some meadows before it passes into the stream. A special drainage district has been formed of the whole parish, and as a loan has been applied for from the Public Works Loan Commissioners, in a short time it may be expected that the necessary sewerage works will be commenced.

Portslade is a large village, one portion of which drains into the sea while another and smaller portion, some half-a-mile to the north of the former, stands by itself on much higher ground. This smaller area drains into a hollow about mid-way between the two areas; this hollow is in the centre of a meadow which has rising ground on all sides; hence a pond is formed into which both sewage and storm-

water find their way; a good deal of the water soaks away into the ground leaving a thick, black residue, which gives off in hot weather very offensive odours. At times these odours are noticeable in the village which stands on the higher ground, and the more so when the south-west winds blow, for then any odours are blown directly towards the houses. This pond has been emptied and the contents used on the adjacent land, and on a market garden; this, however, will have to be done again and again, and can be only of temporary efficiency. There are so many difficulties thrown in the way of altering the present system, and the health of Portslade, on the higher ground, is so good, that at present it has only been deemed advisable to clean out any foul accumulations as often as they arise. There are 104 houses occupied by about 560 persons in this part of the village; of these about 44 houses use the main sewer.

RURAL SANITARY DISTRICT OF STEYNING. TABLE I.—Showing the *Causes of Death* in the Year 1875.

| NAMES OF DISEASES. | SEX. | | AGE. | |
|---|---|---|---|---|
| | Male. | Female. | Aged under 5. | Aged 5 and upwards. |
| ALL DISEASES AND INJURIES ... ... ... | 107 | 123 | 75 | 155 |
| Small-pox — With marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Without marks of vaccination ... .. | ... | ... | ... | ... |
| Small-pox — Where vaccination not known or doubtful | ... | ... | ... | ... |
| Measles ... ... ... ... ... | ... | ... | ... | ... |
| Scarlatina ... ... ... ... ... | ... | ... | ... | ... |
| Diphtheria ... ... ... ... ... | 3 | 2 | 2 | 3 |
| Whooping-cough ... ... ... ... | 3 | 4 | 7 | ... |
| "Continued" Fevers — Typhus ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Enteric ... ... ... | 1 | 1 | 1 | 1 |
| "Continued" Fevers — Of other, or doubtful sorts ... | 1 | 1 | ... | 2 |
| Diarrhœa and Dysentery ... ... ... ... | 4 | 4 | 7 | 1 |
| Cholera ... ... ... ... ... | ... | ... | ... | ... |
| Rheumatic Fever ... ... ... ... | ... | ... | ... | ... |
| Erysipelas ... ... ... ... ... | ... | 3 | 1 | 2 |
| Pyæmia ... ... ... ... ... | ... | ... | ... | ... |
| Puerperal Fever ... ... ... ... | ... | ... | ... | ... |
| *Ague* ... ... ... ... ... ... | ... | ... | ... | ... |
| *Phthisis* ... ... ... ... ... | 9 | 11 | ... | 20 |
| *Bronchitis, Pneumonia, and Pleurisy* ... ... | 18 | 33 | 19 | 32 |
| *Heart-Disease* ... ... ... ... ... | 8 | 16 | ... | 24 |
| *Injuries* ... ... ... ... ... | 6 | 3 | 2 | 7 |

RURAL SANITARY DISTRICT OF STEYNING. TABLE II.—Return of *Sickness* and *Deaths* during the Year 1875.

| NAMES OF DISEASES. | NEW CASES of Sickness and Deaths among Paupers (both in-door and out-door) belonging to the District, and among other Persons belonging to the District who may be (in- or out-) Patients of any Hospital or Dispensary or other Public Medical Institution, whether within or without the District. | | | |
|---|---|---|---|---|
| | SICKNESS. | | DEATHS. | |
| | Aged under 5. | Aged 5 and upwards. | Aged under 5. | Aged 5 and upwards. |
| | I. | II. | III. | IV. |
| ALL DISEASES AND INJURIES ... ... ... | 54 | 368 | 1 | 9 |
| Small-pox — With marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Without marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Where vaccination not known or doubtful | ... | ... | ... | ... |
| Measles ... ... ... ... ... | ... | ... | ... | ... |
| Scarlatina ... ... ... ... ... | 1 | ... | ... | ... |
| Diphtheria ... ... ... ... ... | 1 | 1 | ... | ... |
| Whooping-cough ... ... ... ... | 9 | 6 | ... | ... |
| "Continued" Fevers — Typhus ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Enteric ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Of other, or doubtful sorts ... | 1 | 3 | ... | ... |
| Diarrhœa and Dysentery... ... ... ... | 6 | 12 | ... | 1 |
| Cholera ... ... ... ... ... | ... | ... | ... | ... |
| Rheumatic Fever ... ... ... ... | ... | 2 | ... | ... |
| Erysipelas ... ... ... ... ... | ... | 4 | ... | ... |
| Pyæmia ... ... ... ... ... | ... | ... | ... | ... |
| Puerperal Fever ... ... ... ... | ... | ... | ... | ... |
| *Ague* ... ... ... ... ... ... | ... | 1 | ... | ... |
| *Phthisis* ... ... ... ... ... | ... | 5 | ... | 1 |
| *Bronchitis, Pneumonia, and Pleurisy* ... ... | 12 | 25 | 1 | 5 |
| *Heart-Disease* ... ... ... ... ... | ... | 3 | ... | ... |
| *Injuries* ... ... ... ... ... | 1 | 13 | ... | ... |

# RURAL SANITARY DISTRICT OF HORSHAM.

Population (1871) 19,331. Area in Acres 69,582.
No. of Houses (1871) 3804.

During the year 1875, the births of 622 children and the deaths of 354 persons were registered. Estimating the population at 19,950 in the middle of the year, the birth-rate was 31 per 1000, and the death-rate was 17·7 per 1000, per annum.

Three hundred and twenty-one males and 301 females were born, the births being pretty equally distributed in each quarter.

In like manner 185 males and 169 females died in the period, so that the proportion of males to females was practically unaltered.

The deaths from zymotic diseases, or catching disorders, were 47 in number, or at the rate of 2·3 per 1000. This high rate was chiefly due to the prevalence of scarlet fever and diphtheria in the district, 10 dying from the former and 14 from the latter disease.

*Scarlet fever* was most prevalent in Horsham in the last quarter of the year, when eight fatal cases occurred.

This epidemic was nearly confined to the town of Horsham, and it is probable that over 150 cases of this disease were met with. I am, however, quite unable to give any accurate account, as the disorder broke out amongst the non-pauper class, and no information could be obtained from other sources.

The disease broke out about the beginning of September, when one man was attacked; towards the end of the month, three or four housemaids were taken ill, and the fever also appeared in the family of the medical man who attended the first case. In the early part of October it had spread all over the town, and chiefly among private families. Among the pauper class 20 were attacked, but these were confined to three or four families. In one case the father, mother, and seven children were taken to the Workhouse Infirmary, and all recovered; three servant girls, also, were sent there, and one little boy; all these soon became well again. The first case died on October 1st, the second on October 16th; the next was a servant girl who was sent away from Horsham to the hamlet of Southwater in the same parish, and who appears to have caught cold and had renal suppression; she died on October 21st. On November 10th, two died; one of these cases was that of a little girl who had been to visit in the house of a medical man where one or two inmates had the fever; the other case was the son of a third medical man, and on November 12th another inmate of this house died; one case died on November 11th and another on November 13th. Since then, no

deaths have occurred. It is worthy of notice, as showing the risks which medical men run, that the fever should have broken out in three, if not four, out of the five houses occupied by medical men in Horsham. After November the disease gradually subsided, but its effects could still be traced among the various villages around, in most of which a few mild cases have occurred.

There is no hospital or infirmary in Horsham, other than the one at the Union Workhouse. It is most desirable that some better means should be taken to isolate cases, either by erecting an iron hospital or by sending patients at an early stage to a lonely cottage where the chance of spreading infection is diminished. I must point out, too, how idle it is to conceal the existence of an epidemic, for when this is done no precautions are taken, the disease spreads, a great deal of illness and misery takes place that might be prevented, and injury is done to the trade of a town when any catching disorder is rife. It is rather hard to expect that medical men should give notice of the outbreak of fever among their patients, as very often this might lead to unpleasant consequences. It ought to be the duty of the head of the household to report in a private and confidential manner to the local authority, and then he could be advised what steps to take whenever a contagious disease broke out in the house.

*Diphtheria.*—Fourteen children died of diphtheria in this district during the year; of these six occurred at Horsham, three at Ifield, two in Lower Beeding, two in Shipley, and one at Rusper. At no time was any epidemic of the disorder, but in each quarter of the year a few cases were occasionally met with. In the March quarter, there were three deaths; in the June quarter, five deaths; in the September quarter, five deaths; and in December quarter there was only one death.

At the close of the year 1874, there had been a few cases of diphtheria in New Town and in New Street, Horsham; three or four more families had the disorder in January, and a few more in February, 1875, and amongst these, three children died; they were all little girls, two of them aged six years, and one aged eight years. One died on February 2nd, another on February 12th, and the third, February 17th. Each lived in separate parts of the town; in each case the cottages were cleanly and the water good. It will be remembered that January was a mild month, while February was very cold and winterly. A great many, old and young, were at this time suffering from bronchitis and lung affections; many children, in addition, had sore throats; in a few cases the weakly ones succumbed. Although the cause seemed to be due to atmospheric conditions, the precaution was taken of lime-washing the rooms and ceilings and of soaking the clothes in a solution of chloride of lime or Condy's fluid. Without being too confident as to the merits of disinfection, it is worthy of note that the spread of scarlet fever or diphtheria amongst the poor seemed in almost every case to be at once limited when disinfectants were freely used. Whenever it could be done, sulphur was burned in the infected house, and this is the most effectual disinfectant for most purposes. Great stress must be laid, too, on keeping children from school, and in

washing all linen at home; these simple measures will do much to avert further mischief.

In June, the diphtheria appeared in a lonely cottage in Warninglid Lane, in Lower Beeding parish. The disease appeared in a very malignant form, and two little girls, aged four and six years respectively, died on June 14th after a very short illness. The cottage was in a very dirty state, the people were negligent and careless, and the children were not strong; there was also an adult lodger. The father, who was unable to work, and two sons were removed to the Workhouse Infirmary; the cottage was disinfected by burning sulphur, the rooms were lime-washed, and the two children were buried as speedily as possible. No other case occurred in the neighbourhood.

At Ifield, three children died of "diphtheritic croup" in August and September; these have been entered under the head of diphtheria, but it is doubtful if they were not cases of simple inflammation of the larynx.

At Shipley, two children died from diphtheria in September. The disease occurred in two lonely cottages some distance from any hamlet and from each other. The cottages had been built about 10 years, were situated high and facing the south; they were erected as model cottages, and earth closets were put up and kept well. The water was good. In one cottage lived a man with his wife and two children; the place was clean and neat. The mother, and one boy aged three years, had diphtheria about the last day of August, but recovered; the father and baby did not suffer. In the other cottage lived a man with his wife, four children, and a lodger. A little girl, aged 12 years, fell ill, on August 29th, with a bad throat, and died on Sept. 11th; a younger brother, aged three years, was taken ill about the same time, and died on September 9th. This was a very fine, warm month, and in each case, before the illness began, the mothers and children in each family went out together to glean in the corn-fields. There seemed to be no chance of communication with any infected source, and the cause attributed by the parents was, that the children caught cold by becoming over-heated in the harvest-fields. The usual precautionary measures were carried out, and no further spread occurred.

Diphtheria is a most difficult disease to trace out. It occurs in well-built and clean houses more often than among the squalid and dirty; it appears in lonely, out-lying places, far away from any main road, as well as in towns; often no history of contagion can be traced at all; in most, death takes place very rapidly and before medical aid can be of much service; in very few cases did the disorder show any tendancy to spread. Cold and damp seemed to be the predisposing causes, and perhaps the want of stamina in the individuals attacked had more to do with a fatal result than any other cause.

*Enteric Fever* caused five deaths.

1. A young man, aged 17 years, felt ill in the middle of January and died of pneumonia on February 4th; another child, seven years old, was also ill, but recovered; the father, mother, and five other children did not suffer. The cause seemed to be a defective trap close

to the back door, which allowed sewer gas to escape; this was remedied and the disease stopped.

2. At Strood Green are three cottages with one well in common; to each cottage is a garden in front, but a confined area behind; in this small area was a foul slut-hole and pig-stye which had not been cleaned for a long time, and which, the weather being hot, gave off foul gases. In one of these cottages lived a widow with six children; of these, five had "low" fever early in June; they recovered, and then the mother fell ill, was removed to the Workhouse Infirmary and died on July 2nd. Want of common cleanliness seemed to be the cause of the disease. The other two families did not suffer. In another cottage close to the above, the children, six in number, and their parents, all suffered from low fever, but recovered. Behind and close to the cottage was a foul pig-stye and accumulation of filth. These nuisances were removed and the cottages cleansed. The water-supply was good in these cases.

3. At Slaughter Bridge, a lonely spot in the parish of Warnham, are two cottages, in one of which a little girl fell ill at the end of July, with enteric fever; she recovered. A woman, 59 years of age, living next door, had been taken ill about the middle of June and died on July 19th of enteric fever. This woman had a daughter who lived at Warnham Docks, and who came over to nurse her mother, "going backwards and forwards." She fell ill on July 25th, the day after her mother was buried, but she had been feeling unwell some days previously; she recovered. The husband and two children did not suffer.

4. At Parbrook, a small hamlet in Billingshurst parish, enteric fever broke out in a cottage occupied by a man, his wife, and three children. The cottage was well-made, but the occupants were dirty; the water in the well was polluted, and there was a foul ditch close to the back door. On December 12th, a boy, six years old, and a girl, three years old, were taken ill with sickness and diarrhœa, and died in 24 hours; the mother and baby, who also fell ill, eventually recovered. The water had previously been condemned and had only been used for cleaning purposes; a good supply had been obtained from a neighbouring spring. In this case, the children were buried as soon as possible and the soiled clothes were at once burned; the rooms were disinfected and lime-washed. In all these cases accumulation of filth seemed to be the cause; in all, the disorder broke out in lonely or isolated places; in all, common cleanliness could have prevented any outbreak. The fever seemed to have originated *de novo* in these instances; no history of communication with any infected person could be traced, except in the third case, where the daughter seemed to catch the disease from her mother.

The drainage at Horsham is still very defective, and many parts are most badly drained. No sewer is properly ventilated, and most of them are not properly constructed. The sewage finds its way at various points into the river, which it enters in its raw state.

This state of things has long occupied the attention of the inhabitants, and last year a Local Board was formed, which will undertake, among other things, the necessary sanitary works. Nothing

can be done to improve matters until a good system of sewerage is adopted, and in nearly every case new sewers must be laid down. Already plans have been sent in, and it is probable that the town will soon be efficiently drained and the sewage utilized by being used to irrigate land before it finds its way into any stream.

Ifield is a large and increasing place in the Horsham district. At one time the earth-system was much in use here, but the people gave it up after a while. At present, there are three or four outfalls, or rather three or four foul ditches, which receive the sewage; at different times these ditches are cleansed; but this is only a temporary measure, and the nuisance soon becomes as bad as ever. This place, like many other villages, presents difficulties for drainage. It is a long, straggling place, and the main sewer will have to be about a mile in length; the other sewers, in side streets, will be about another mile-and-a-quarter long. The area, however, to be drained is but thinly populated, and differs from the case of a large town, where there are houses in all directions. It is proposed to drain Ifield and Crawley (both places are adjacent) at a cost of about £3000. In these two parishes there are about 450 houses, most of which will make use of the new sewer. There are, however, no water-works in Ifield, but some artificial means must be adopted to properly flush the drain. It is proposed to use the sewage to irrigate some low-lying land, but it is said that in periods of heavy rain this land is at times under water.

The average mortality in Ifield has been for many years about 16 per 1000.

RURAL SANITARY DISTRICT OF HORSHAM. TABLE III.—Showing the *Causes of Death* in the Year 1875.

| NAMES OF DISEASES. | SEX. | | AGE. | |
|---|---|---|---|---|
| | Male. | Female. | Aged under 5. | Aged 5 and upwards. |
| ALL DISEASES AND INJURIES ... ... ... | 185 | 169 | 105 | 249 |
| Small-pox — With marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Without marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Where vaccination not known or doubtful | ... | ... | ... | ... |
| Measles ... ... ... ... ... | ... | ... | ... | ... |
| Scarlatina ... ... ... ... ... | 2 | 8 | 3 | 7 |
| Diphtheria ... ... ... ... ... | 5 | 9 | 8 | 6 |
| Whooping-cough ... ... ... ... | 1 | 2 | 2 | 1 |
| "Continued" Fevers — Typhus ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Enteric ... ... ... | 2 | 3 | 1 | 4 |
| "Continued" Fevers — Of other, or doubtful sorts ... | 3 | 3 | ... | 6 |
| Diarrhœa and Dysentery ... ... ... ... | 2 | 4 | 2 | 4 |
| Cholera ... ... ... ... ... | ... | ... | ... | ... |
| Rheumatic Fever ... ... ... ... | ... | ... | ... | ... |
| Erysipelas ... ... ... ... ... | 3 | ... | ... | 3 |
| Pyæmia ... ... ... ... ... | ... | ... | ... | ... |
| Puerperal Fever ... ... ... ... | ... | ... | ... | ... |
| *Ague* ... ... ... ... ... ... | ... | ... | ... | ... |
| *Phthisis* ... ... ... ... ... | 20 | 19 | ... | 39 |
| *Bronchitis, Pneumonia, and Pleurisy* ... ... | 45 | 28 | 27 | 46 |
| *Heart-Disease* ... ... ... ... | 9 | 16 | ... | 25 |
| *Injuries* ... ... ... ... ... | 10 | 1 | 1 | 10 |

RURAL SANITARY DISTRICT OF HORSHAM. TABLE IV.—Return of *Sickness* and *Deaths* during the Year 1875.

| NAMES OF DISEASES. | NEW CASES of Sickness and Deaths among Paupers (both in-door and out-door) belonging to the District, and among other Persons belonging to the District who may be (in- or out-) Patients of any Hospital or Dispensary or other Public Medical Institution, whether within or without the District. | | | |
|---|---|---|---|---|
| | SICKNESS. | | DEATHS. | |
| | Aged under 5. | Aged 5 and upwards. | Aged under 5. | Aged 5 and upwards. |
| | I. | II. | III. | IV. |
| ALL DISEASES AND INJURIES ... ... ... | 177 | 982 | 7 | 44 |
| Small-pox — With marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Without marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Where vaccination not known or doubtful | ... | ... | ... | ... |
| Measles ... ... ... ... ... | ... | 2 | ... | ... |
| Scarlatina ... ... ... ... ... | 4 | 16 | ... | ... |
| Diphtheria ... ... ... ... ... | 4 | 16 | ... | 2 |
| Whooping-cough ... ... ... ... | 18 | 11 | 1 | ... |
| "Continued" Fevers — Typhus ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Enteric ... ... ... | 3 | 11 | ... | 1 |
| "Continued" Fevers — Of other, or doubtful sorts ... | ... | 7 | ... | ... |
| Diarrhœa and Dysentery... ... ... ... | 23 | 41 | ... | 1 |
| Cholera ... ... ... ... ... | ... | ... | ... | ... |
| Rheumatic Fever ... ... ... ... | ... | 1 | ... | ... |
| Erysipelas ... ... ... ... ... | ... | 8 | ... | 1 |
| Pyæmia ... ... ... ... ... | ... | ... | ... | ... |
| Puerperal Fever ... ... ... ... | ... | ... | ... | ... |
| *Ague* ... ... ... ... ... ... | ... | 5 | ... | ... |
| *Phthisis* ... ... ... ... ... | ... | 17 | 1 | 4 |
| *Bronchitis, Pneumonia, and Pleurisy* ... ... | 8 | 39 | ... | 9 |
| *Heart-Disease* ... ... ... ... ... | ... | 7 | ... | 1 |
| *Injuries* ... ... ... ... ... | ... | 30 | ... | 2 |

# RURAL SANITARY DISTRICT OF PETWORTH.

Population (1871) 10,138. Area in Acres 44,747.
No. of Houses (1871) 2008.

During the year 1875, the births of 323 children and the deaths of 178 persons were registered; of the births, 173 were males and 150 females; of the deaths, 94 were males and 84 were females.

Estimating the population in the middle of the year at 10,170, the birth-rate is 31·7, and the death-rate is 17·5 per 1000.

The deaths from zymotic disorders were 10 in number, giving a rate of 1·0 per 1000, or less than the average in the Combined District.

Towards the close of the year an isolated case of *scarlet fever* appeared, here and there, in two or three of the villages, but the cases were very mild in character and there was no spread beyond the cottage in which they appeared; in each instance the children were kept from school.

*Diphtheria* appeared in a small hamlet, in a lonely part of the district, in the parish of Wisborough Green.

Case 1. The first cottage was situated in a damp wood and was some half-a-mile distant from any other house; the place was very dilapidated and dirty, the window panes were broken, and the inmates were very careless and filthy. There lived here a man with his wife, three sons, a daughter, and grandchild. The eldest boy, 14 years, worked with his father, who was an agricultural labourer, and was not affected; the other boys, aged 11 and eight years respectively, were taken ill about the middle of May; the eldest one died on May 20th, while the other one recovered; no other inmate of the cottage suffered. The water used by these people was of fair quality and obtained from an adjacent dipping hole. There were no drains to the house, and all the dirty water was thrown on the garden.

Case 2. The next family affected lived about half-a-mile away from the preceding case; the families did not associate, but the fathers worked together. This family consisted of the father, mother, and four childen. The baby, six months old, fell ill on May 16th and died on May 21st. A brother, John, aged six years, was next attacked, and died on May 28th, and a sister, three years old, fell ill in a few days and died on June 14th. The parents and a little boy, aged four years, escaped. Next door was an empty cottage. Close to, and on the other side of the road, were two other cottages, but none of the inmates there suffered, although none of them seemed very strong, and one of the cottages was in a very filthy state. In the first case, the children were liable to damp and cold, but in the second case the cottage was well situated, and the people neat and clean. The situation, too, was

high and dry; the water was good, and all dirty water was thrown over the garden. The weather at the time was fine and warm, and there was no communication between the two families. So distant was the hamlet from any other place that isolation was almost perfect, nor had any of the children been away from home. In each case, the house was disinfected, lime-washed, and repaired; the clothes were soaked in a solution of chloride of lime and then well washed. No other cases were met with in the district.

*Whooping-cough* was very prevalent in many villages on the Weald clay; among the pauper population, 52 cases were returned as having suffered from this disorder, but of these none died.

It was mentioned in the last report that the water-supply to Petworth was defective in quantity and quality. In consequence of this, and after some correspondence had passed between Lord Leconfield and the Rural Sanitary Authority, a committee of the inhabitants was formed, and a report drawn up by them, suggesting that the sewage should be diverted from the river Rother, and that the present supply of river water should be increased in quantity, and that it should be properly filtered before being distributed to the town. The committee further pointed out that the present water-works are the private property of Lord Leconfield, and that the town had for years been indebted for its water supply to the owners of Petworth House.

A few weeks after the committee had reported, Lord Leconfield offered to leave the question of the diversion of the sewage in the hands of the Rural Sanitary Authority, at the same time giving them every facility for carrying the sewage through his land, as suggested in the committee's report. With regard to the better supply of water to the town, his lordship proposed to erect the proper filtering beds, to enlarge and alter the present tanks, and to place the machinery and pipes from the river to the tank in a good and efficient working state. Lord Leconfield then proposed that the works should be leased by him to the Local Authority, under clause 51, s. 2, of the "Public Health Act, 1875," at a moderate rent, on condition that all the works connected with the river-supply should be kept in good, sound working order by the Local Authority.

There can be no doubt that were these proposals carried out, there would be a plentiful supply of good, pure, and wholesome water for the inhabitants of Petworth; and it is much to be desired that this liberal offer should be accepted.

RURAL SANITARY DISTRICT OF PETWORTH. TABLE V.—Showing the *Causes of Death* in the Year 1875.

| NAMES OF DISEASES. | SEX. | | AGE. | |
|---|---|---|---|---|
| | Male. | Female. | Aged under 5. | Aged 5 and upwards. |
| ALL DISEASES AND INJURIES ... ... ... | 94 | 84 | 43 | 135 |
| Small-pox { With marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox { Without marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox { Where vaccination not known or doubtful | ... | ... | ... | ... |
| Measles ... ... ... ... ... | ... | ... | ... | ... |
| Scarlatina ... ... ... ... ... | ... | 1 | ... | 1 |
| Diphtheria ... ... ... ... ... | 3 | 2 | 2 | 3 |
| Whooping-cough ... ... ... ... | ... | 2 | 2 | ... |
| "Continued" Fevers { Typhus ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers { Enteric ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers { Of other, or doubtful sorts ... | ... | ... | ... | ... |
| Diarrhœa and Dysentery ... ... ... ... | 1 | ... | ... | 1 |
| Cholera ... ... ... ... ... | ... | ... | ... | ... |
| Rheumatic Fever ... ... ... ... | ... | ... | ... | ... |
| Erysipelas ... ... ... ... ... | ... | 1 | ... | 1 |
| Pyæmia ... ... ... ... ... | ... | ... | ... | ... |
| Puerperal Fever ... ... ... ... | ... | ... | ... | ... |
| *Ague* ... ... ... ... ... ... | ... | ... | ... | ... |
| *Phthisis* ... ... ... ... ... | 10 | 9 | ... | 19 |
| *Bronchitis, Pneumonia, and Pleurisy* ... ... | 13 | 15 | 11 | 17 |
| *Heart-Disease* ... ... ... ... ... | 14 | 9 | ... | 23 |
| *Injuries* ... ... ... ... ... | 3 | 3 | 2 | 3 |

RURAL SANITARY DISTRICT OF PETWORTH. TABLE VI.—Return of *Sickness* and *Deaths* during the Year 1875.

| NAMES OF DISEASES. | NEW CASES of Sickness and Deaths among Paupers (both in-door and out-door) belonging to the District, and among other Persons belonging to the District who may be (in- or out-) Patients of any Hospital or Dispensary or other Public Medical Institution, whether within or without the District. | | | |
|---|---|---|---|---|
| | SICKNESS. | | DEATHS. | |
| | Aged under 5. | Aged 5 and upwards. | Aged under 5. | Aged 5 and upwards. |
| | I. | II. | III. | IV. |
| ALL DISEASES AND INJURIES ... ... ... | 199 | 941 | 8 | 35 |
| Small-pox — With marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Without marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Where vaccination not known or doubtful | ... | ... | ... | ... |
| Measles ... ... ... ... ... | ... | ... | ... | ... |
| Scarlatina ... ... ... ... ... | 1 | ... | ... | ... |
| Diphtheria ... ... ... ... ... | 2 | 4 | 2 | 2 |
| Whooping-cough ... ... ... ... | 50 | 52 | ... | ... |
| "Continued" Fevers — Typhus ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Enteric ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Of other, or doubtful sorts ... | ... | 5 | ... | ... |
| Diarrhœa and Dysentery ... ... ... | 34 | 100 | ... | 2 |
| Cholera ... ... ... ... ... | ... | ... | ... | ... |
| Rheumatic Fever ... ... ... ... | ... | 2 | ... | ... |
| Erysipelas ... ... ... ... ... | ... | 8 | ... | ... |
| Pyæmia ... ... ... ... ... | ... | 1 | ... | ... |
| Puerperal Fever ... ... ... ... | ... | ... | ... | ... |
| *Ague* ... ... ... ... ... | ... | ... | ... | ... |
| *Phthisis* ... ... ... ... ... | ... | 11 | ... | 3 |
| *Bronchitis, Pneumonia, and Pleurisy* ... ... | 11 | 57 | 3 | 1 |
| *Heart-Disease* ... ... ... ... ... | ... | 8 | ... | 3 |
| *Injuries* ... ... ... ... ... | 4 | 37 | ... | ... |

# RURAL SANITARY DISTRICT OF THAKEHAM.

Population (1871) 8422. Area in Acres 38,784.
No. of Houses (1871) 1705.

During the year 1875, the births of 260 children and the deaths of 169 persons, were registered. Estimating the population in the middle of the year at 8586 the birth-rate was 31·4, and the death-rate was 19·6 per 1000. Of the births, 128 were males and 132 were females; of the deaths, 94 were males and 75 were females. The deaths from zymotic disorders were 22 in number, or a rate of 2·5 per 1000 as against an average of 1·7 for the whole district. Of these 22 deaths, 10, or nearly one-half, were from *whooping-cough*. This disease prevailed chiefly about Pulborough, and caused death in nearly all the cases by inducing bronchitis or pneumonia. Nine died from *diarrhœa*. Two children in the same family died at Amberley from *diphtheria*. There were no other cases in the neighbourhood before or since. In these two cases no medical man was called in until the children were dying, and so no definite account of the illness could be made out. The history seemed to point to the children having taken cold, and death ensuing from laryngitis. The house was cleansed and lime-washed, the clothes were washed at home and no other case followed. No children suffered from measles. One child died of kidney disease following *scarlet fever*; the history of this case was as follows:—

In June, 1875, scarlet fever appeared in Sullington parish among some children attending the school.

The first case was that of a child, named William Henry H., four years of age; there were five other children in the family, none of whom had had the disease, and none of them caught it now. The mother, too, was confined at the same time and both she and the baby did well. The little boy and his two sisters, six and four years old respectively, went to Sullington School. Next door lived an old married couple, who did not have the fever; no other cottage was near; but in Sullington Lane there lived some six families; these dwelt in semi-detached cottages, thus—

| | | |
|---|---|---|
| Group 1. | 1. Wm. R., wife, and four children ... | 6 |
| | 2. Geo. H., wife, and four children ... | 6 |
| Group 2. | 3. Widow P. and six children ... | 7 |
| | 4. Geo. Y., wife, and six children ... | 8 |
| Group 3. | 5. Wm. L., wife, and three children ... | 5 |
| | 6. Edward P. and three children ... | 4 |
| | | 36 |

Group 1 was distant about 100 yards from Group 2, while Group 3 was one-third of a mile further off; no other cottages were near.

W. H. H. was taken ill on June 20th, and on that day ceased to go to school; his two sisters, however, went to school on June 21st and 22nd, and then left off attending. About 58 children attend Sullington School and these are divisible into three classes. But all the children attacked were in the third class, and W. H. H. and one of his sisters were also in this division of the school; further, the H.'s and R.'s (who were the next attacked) sat next each other in school. Although the origin of W. H. H.'s disorder could not be traced, yet it seems probable that either he or his sisters were the means of propagating the disease further. The school was closed on June 29th and re-opened on August 30th.

In the three groups of cottages in which scarlet fever appeared, the following result was obtained:—

Group 1. Out of four children at home in R.'s family (none of whom had before had the fever) three failed. Two fell ill on June 24th, *i.e.*, four days after W. H. H. was attacked; a third child was taken ill on July 4th; all recovered. The only child that escaped was a boy, aged 15 years, who worked on an adjacent farm and was kept away. Next door, and often going in and out, lived the H. family, including two adults and four children. The father, mother, and eldest son had scarlet fever many years ago; the three youngest children, 10 years, six years, and four years old respectively, have never had the fever and did not have it now.

Group 2. Out of six children at home in P.'s family, four fell ill; it is very doubtful if any have had scarlet fever before. M. P., aged seven years, attending Sullington School, was attacked on June 26th and recovered. H. and A. P., aged 13 years and 10 years respectively, escaped, but the mother fancies they had scarlet fever the previous winter. A. P., two years old, was taken ill about July 26th and died on July 31st in a convulsion. Alice, aged five years, fell ill at the end of July and recovered; and an elder brother, aged 16 years, was taken ill about July 7th and recovered. In the adjoining cottage, occupied by G. Y., none had scarlet fever. The mother and the three eldest children had the fever many years ago; three other children never had the fever and escaped now, although there must have been daily intercourse between the two families.

Group 3. In this group, the three children of Edward P. were taken ill and all recovered; none of them had ever had scarlet fever before. A little girl, aged eight years, fell ill on June 28th; her two brothers on July 8th. Although all these three children went to the same school, yet the little girl was the only one who sat in the same class with the H.'s The school was closed on June 29th and therefore the two brothers most likely caught the disease from their sister. The next-door neighbours, the L.'s, escaped the disorder; their children also attended the school and had never suffered from scarlet fever.

Taking the six families together with the H.'s, it will be found that there were 12 adults and 32 children brought more or less in contact with the disorder, or 44 in all.

None of the 12 adults were attacked, although nine had not had it before. Of the 32 children, 11 were attacked and 21 escaped; of these, 28 never had scarlet fever before, while four were attacked some years ago. None of those who had formerly had the fever had it a second time.

It will be noticed that the first case occurred on June 20th; the second and third on June 24th, the fourth and fifth on June 26th and 28th; this would give a period of incubation ranging from four to eight days. After these five children were attacked, the remaining six must have caught the disease from their brothers or sisters. James R. fell ill on July 4th, or 11 days after his sister was attacked and nine days after her rash appeared. Edward and John P. fell ill on July 8th, or 10 days after their sister was attacked and eight days after her rash appeared. Three of P.'s children fell ill at irregular intervals; as soon as one recovered another failed. George P. was attacked about a fortnight after his brother began to be ill, while two others were taken ill a fortnight later.

Of the 11 patients, one died and 10 recovered.

The precautions adopted were to close the school and to wash all clothes, &c., at home, these having been previously soaked in chloride of lime and water.

The cottages were quite isolated and no other neighbours came to see them, so the disorder was confined to a very narrow area.

When the children were sufficiently recovered the rooms were cleansed and lime-washed.

*Small-pox.*—One case of small-pox occurred within this district during the year. It arose thus:—

At the end of the year 1874, a young man, M. H. W., 26 years of age, was helping to build a house about 200 yards from the Stockwell Small-pox Hospital. He was single, had only been in London five weeks, and lived close to his place of work. He had never been into the Small-pox Hospital, but had been close to patients who were taken in there.

On Christmas-eve, 1874, he returned to Bognor to spend a few days with his friends. Two married sisters, one living at Storrington and one at Arundel, also went to Bognor to spend Christmas with their parents. On December 25th, M. H. W. was taken ill with a mild form of small-pox, and in 10 days he was well again, without having taken any medical advice. He had been vaccinated successfully in infancy, and the attack was so mild that until other members of his family fell ill, he was not aware he had been suffering from small-pox.

On New Year's day, 1875, Mrs. S., one of the married sisters, returned to Storrington in good health; in 10 days she complained of feeling unwell, and four days after she was found to be suffering from confluent small-pox. She had been successfully vaccinated in infancy and again in 1866; upon each arm there appeared three fair scars of previous vaccination; she remembers that in 1866 the eruption did not "take well." At this time the only inmates of the house were Mr. and Mrs. S., an infant a year old, and a small servant girl, 14

years of age. The infant, which had been successfully vaccinated when three months old, was sent to its grandmother in a neighbouring town and never had the disease. The husband and the servant girl were at once re-vaccinated, and in each case "the arm rose well;" neither of them had small-pox.

As the house in which Mrs. S. lived was a public house, it was at once closed, and indeed the mere fact of there being small-pox there effectually kept the villagers away. No intercourse took place between those in the infected house, and those without, and no further case occurred.

The sanitary authority ordered the destruction of the bedding, clothing, &c. in the house, and these, on the recovery of the patient, were burnt and the rooms were disinfected by burning sulphur in them.

No other case occurred in the village. Mrs. S. was confined on February 16th; the child was prematurely born (seven months) and died five days after; the mother made a good recovery.

To return to the family at Bognor.

At the Christmas gathering there were assembled—

Mr. and Mrs. W., the parents,
Mrs. S., the married sister at Storrington,
Mr. and Mrs. E., the married couple at Arundel,
Two single sisters,
Three single brothers (including M. H. W.)

Each member of this family was successfully vaccinated when a child, and each member suffered from small-pox; in each case recovery took place with one exception. This exception was Mrs. E., a married sister of M. H. W., who lived at Arundel. Mrs. E. had been vaccinated when an infant, but not since; she left Bognor (the infected spot) on New Year's day, 1875, and spent a few days at Storrington with her sister, Mrs. S.; on January 10th she returned with her husband to Arundel. At this time she was pregnant; and on January 15th was confined of a boy, who died 10 days afterwards. At the same time, Mrs. E. was taken ill with a very malignant form of small-pox and died on January 20th; she was buried the next day, and no other cases occurred. Bognor and Arundel are not in the West Sussex Combined Sanitary district, and for these particulars I am indebted to the medical attendant in each case.

The death-rate in Thakeham district is usually low; in 1875, it was the highest in the district. This seems chiefly due to the number of aged people who died from the inclement winter of 1874-75. Of the 169 deaths, no fewer than 71 were 60 years old and upwards; old age and chest affections carried off 40. This is shown by the fact that 58 died in the winter quarter, 48 in the spring quarter, 19 in the summer, and 44 in the autumn quarter. Amongst the pauper population there were 310 cases of sickness; of these 20 died; amongst these were the single case of scarlet fever and the two cases of diphtheria above mentioned.

Five males and three females died in the Union Workhouse; of these only one was below 70 years of age.

There is no place in this district above the size of a large village; the cottages generally have a garden and are often some distance apart from each other. Pulborough, Amberley, and Storrington are the places of most considerable size. In these, as in other villages, very little sewage from cesspools passes down the drains, but mainly dirty house water. In Storrington, the sewer has been ventilated by means of three or four ordinary stack pipes carried from the drain up above the eaves of the houses.

In Pulborough an open and shallow brick gutter runs along the main street of the village, and if this is kept properly flushed, all the dirty water is carried away into the river below any point where it is used for drinking purposes. The soil is very sandy and the houses stand on a declivity; any closed drain would rapidly become blocked up by sand washed down during a storm. If earth-closets could be in general use, and only dirty water allowed to run down such an open channel at a proper gradient, the system would in many villages prove simple and effectual. At the outfall such water could be passed over land, and although of but little manurial value, it might pay for the expenses of carrying it.

RURAL SANITARY DISTRICT OF THAKEHAM. TABLE VII.—Showing the *Causes of Death* in the Year 1875.

| NAMES OF DISEASES. | SEX. | | AGE. | |
|---|---|---|---|---|
| | Male. | Female. | Aged under 5. | Aged 5 and upwards. |
| ALL DISEASES AND INJURIES ... ... ... | 94 | 75 | 55 | 114 |
| Small-pox — With marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Without marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Where vaccination not known or doubtful | ... | ... | ... | ... |
| Measles ... ... ... ... ... | ... | ... | ... | ... |
| Scarlatina ... ... ... ... ... | 1 | ... | 1 | ... |
| Diphtheria ... ... ... ... ... | ... | 2 | 2 | ... |
| Whooping-cough ... ... ... ... | 6 | 4 | 10 | ... |
| "Continued" Fevers — Typhus ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Enteric ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Of other, or doubtful sorts ... | ... | ... | ... | ... |
| Diarrhœa and Dysentery ... ... ... ... | 5 | 4 | 7 | 2 |
| Cholera ... ... ... ... ... | ... | ... | ... | ... |
| Rheumatic Fever ... ... ... ... | ... | ... | ... | ... |
| Erysipelas ... ... ... ... ... | ... | ... | ... | ... |
| Pyæmia ... ... ... ... ... | ... | ... | ... | ... |
| Puerperal Fever ... ... ... ... | ... | ... | ... | ... |
| *Ague* ... ... ... ... ... ... | ... | ... | ... | ... |
| *Phthisis* ... ... ... ... ... | 1 | 5 | ... | 6 |
| *Bronchitis, Pneumonia, and Pleurisy* ... ... | 21 | 19 | 16 | 24 |
| *Heart-Disease* ... ... ... ... ... | 8 | 7 | ... | 15 |
| *Injuries* ... ... ... ... ... | 4 | ... | ... | 4 |

RURAL SANITARY DISTRICT OF THAKEHAM. TABLE VIII.—Return of *Sickness* and *Deaths* during the Year 1875.

| NAMES OF DISEASES. | NEW CASES of Sickness and Deaths among Paupers (both in-door and out-door) belonging to the District, and among other Persons belonging to the District who may be (in- or out-) Patients of any Hospital or Dispensary or other Public Medical Institution, whether within or without the District. | | | |
|---|---|---|---|---|
| | SICKNESS. | | DEATHS. | |
| | Aged under 5. | Aged 5 and upwards. | Aged under 5. | Aged 5 and upwards. |
| | I. | II. | III. | IV. |
| ALL DISEASES AND INJURIES ... ... ... | 35 | 255 | 3 | 17 |
| Small-pox — With marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Without marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Where vaccination not known or doubtful | ... | ... | ... | ... |
| Measles ... ... ... ... ... | ... | ... | ... | ... |
| Scarlatina ... ... ... ... ... | 2 | 5 | 1 | ... |
| Diphtheria ... ... ... ... ... | 2 | ... | 2 | ... |
| Whooping-cough ... ... ... ... | 13 | 10 | ... | ... |
| "Continued" Fevers — Typhus ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Enteric ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Of other, or doubtful sorts ... | ... | ... | ... | ... |
| Diarrhœa and Dysentery... ... ... ... | 4 | 16 | ... | ... |
| Cholera ... ... ... ... ... | ... | ... | ... | ... |
| Rheumatic Fever ... ... ... ... | ... | 2 | ... | ... |
| Erysipelas ... ... ... ... ... | ... | ... | ... | ... |
| Pyæmia ... ... ... ... ... | ... | ... | ... | ... |
| Puerperal Fever ... ... ... ... | ... | ... | ... | ... |
| *Ague* ... ... ... ... ... ... | ... | ... | ... | ... |
| *Phthisis* ... ... ... ... ... | ... | 6 | ... | 1 |
| *Bronchitis, Pneumonia, and Pleurisy* ... ... | 1 | 18 | ... | 4 |
| *Heart-Disease* ... ... ... ... ... | ... | 14 | ... | 1 |
| *Injuries* ... ... ... ... ... | ... | 12 | ... | 1 |

# RURAL SANITARY DISTRICT OF EAST PRESTON.

Population (1871) 7674. Area in Acres 30,520.
No. of Houses (1871) 1467.

During the year 1875, the births of 214 children and the deaths of 142 persons, were registered; of the births, 112 were males and 102 were females; of the deaths, 77 were males and 65 were females. Estimating the population in the middle of the year at 8110, the birth-rate is 26·4 per 1000, and the death-rate is 17·5.

This district has been very healthy during the past year; the deaths from zymotic disorders were seven in number, giving a rate of only ·8 per 1000; of these, one infant died of *whooping-cough*, five children of *diarrhœa*, and one woman, an imported case, died of *enteric fever*. There were 10 deaths in East Preston Workhouse, of whom seven were 75 years old and upwards. The people in this district live to a great age; 51 out of the 142 who died, or more than one-third of the whole, lived to be over 60 years of age. Twenty infants died under one year of age; of these, four were born prematurely, six died of *debility* or *atrophy* from birth, three from *convulsions*, four from *bronchitis*, one each from *whooping-cough* and *diarrhœa*, while in one case the cause of death was unknown.

Scarlet fever and measles were nearly absent during the year; in two places, enteric fever made its appearance.

*Enteric Fever.*—Some cases of enteric fever occurred at Goring, in the course of the summer. By the side of the main road stand two semi-detached cottages, and about 100 yards further on is another new-built lodge (Group A). On the opposite side of the road is a row of six more cottages (Group B). The water-supply to all these cottages is obtained from wells, and the water itself is of good quality. In the first group, enteric fever attacked three persons; in the second group, none fell ill.

Group A. In the first cottage lived a man with his wife and an infant three months old. The man was taken ill on June 5th, and recovered; the wife and baby were not attacked. This man had only lived in the cottage three months, but the previous occupant, who has now gone to an adjacent village, was never well when he lived in this house, although before and since he has enjoyed good health. In the next and adjoining cottage lived a man with his wife and four children; the latter are not very strong, but no case of fever occured. In the lodge, a short way distant, there also lived a man with his wife and four children; one child was away at the time the illness broke out, and another was an infant six months old. The other two children fell ill with the fever; one little girl, four years

and six months old, was taken ill on June 20th, while her brother, aged three years and six months old, had been attacked three days previously. In each case recovery took place and no others were affected. No other cases of this fever had been met with in the neighbourhood, nor had any of the people been away from home for some months. The cottages themselves were well-built and in good repair. Earth closets were in use in each house and they were kept in good order.

Group B. This group consisted of six new-built cottages, and these also were in good repair. The refuse water and the drainage of each group ran into a large sewer, which also carried off all the storm water. This sewer was fairly constructed, about half-a-mile in length, but not ventilated. There was no regular flushing of the sewer, nor could it be thoroughly cleansed, unless a great quantity of rain had fallen. The consequence of this was, that in dry weather the refuse water from the cottages only passed a short distance down the sewer, while foul gases might accumulate and escape from any trap, since there was no means of ventilation.

Although each group of houses drained into the sewer, there was this difference between them. In Group A, there was a trap *inside* each house, and the waste-pipe communicated directly with the drain. In Group B, there was only one large trap in common to the six houses, and this was a short distance *outside* the cottages. In the former case, sewer gas entered the house at times, and the inmates used often to notice "bad smells as from the drains;" in the latter case, no bad smells were ever noticed in the houses. In the first case, enteric fever attacked one adult and two children; in the latter case, no illness was met with. It cannot be too strongly understood that all traps within a house are dangerous. A trap is no sufficient safeguard against the escape of sewer gas; it is constantly getting out of order, and no deodoriser or no disinfectant thrown down will ever render a trap safe. The only method of ensuring safety is to have a trap of sufficient size, to place it outside the house, and to ventilate the drain by a pipe carried upwards above the eaves of the house, but not near a window. By doing this, and by flushing the drain every day with plenty of clean water, a house is rendered tolerably secure.

The owner of the houses in Group A altered the position of the traps and ventilated the sewer. No other cases of fever have since occurred here.

There was one fatal case of *enteric fever* in this district during the year, but this was an imported one. The patient, a young woman, had been in service in Lewes, where there was an outbreak of the disease in the early part of the year; she caught the disorder there, was sent home, and died.

In all these cases the excreta were disinfected by adding Condy's fluid, or carbolic acid solution, and were buried as soon as possible; the bedding, clothing, &c., were soaked in one of these solutions and then washed in boiling water at home.

Amongst the pauper population, there were 359 cases of illness, and of these, 18, or one in 20, died. No death occurred in this class

from any catching or zymotic disorder; nor were there any cases of sickness reported from any of the common diseases of childhood except seven from *diarrhœa*, and these recovered.

Part of the parish of Broadwater was cut off in the autumn of 1875, and added to the Urban Sanitary District of Worthing. This will take away about 600 persons from this district, who, in future, will be included in the Urban District.

RURAL SANITARY DISTRICT OF EAST PRESTON. TABLE IX.—Showing the *Causes of Death* in the Year 1875.

| NAMES OF DISEASES. | SEX. | | AGE. | |
|---|---|---|---|---|
| | Male. | Female. | Aged under 5. | Aged 5 and upwards. |
| ALL DISEASES AND INJURIES ... ... ... | 77 | 65 | 30 | 112 |
| Small-pox — With marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Without marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Where vaccination not known or doubtful | ... | ... | ... | ... |
| Measles ... ... ... ... ... | ... | ... | ... | ... |
| Scarlatina ... ... ... ... ... | ... | ... | ... | ... |
| Diphtheria ... ... ... ... ... | ... | ... | ... | ... |
| Whooping-cough ... ... ... ... | 1 | ... | 1 | ... |
| "Continued" Fevers — Typhus ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Enteric ... ... ... | ... | 1 | ... | 1 |
| "Continued" Fevers — Of other, or doubtful sorts ... | ... | ... | ... | ... |
| Diarrhœa and Dysentery ... ... ... ... | 2 | 3 | 4 | 1 |
| Cholera ... ... ... ... ... | ... | ... | ... | ... |
| Rheumatic Fever ... ... ... ... | ... | ... | ... | ... |
| Erysipelas ... ... ... ... ... | ... | ... | ... | ... |
| Pyæmia ... ... ... ... ... | ... | ... | ... | ... |
| Puerperal Fever ... ... ... ... | ... | ... | ... | ... |
| *Ague* ... ... ... ... ... ... | ... | ... | ... | ... |
| *Phthisis* ... ... ... ... ... | 8 | 10 | ... | 18 |
| *Bronchitis, Pneumonia, and Pleurisy* ... ... | 13 | 4 | 7 | 10 |
| *Heart-Disease* ... ... ... ... | 9 | 9 | ... | 18 |
| *Injuries* ... ... ... ... ... | 1 | 2 | ... | 3 |

RURAL SANITARY DISTRICT OF EAST PRESTON. TABLE X.—Return of *Sickness* and *Deaths* during the Year 1875.

| NAMES OF DISEASES. | NEW CASES of Sickness and Deaths among Paupers (both in-door and out-door) belonging to the District, and among other Persons belonging to the District who may be (in- or out-) Patients of any Hospital or Dispensary or other Public Medical Institution, whether within or without the District. | | | |
|---|---|---|---|---|
| | SICKNESS. | | DEATHS. | |
| | Aged under 5. | Aged 5 and upwards. | Aged under 5. | Aged 5 and upwards. |
| | I. | II. | III. | IV. |
| ALL DISEASES AND INJURIES ... ... ... | 52 | 307 | 2 | 16 |
| Small-pox — With marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Without marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Where vaccination not known or doubtful | ... | 1 | ... | ... |
| Measles ... ... ... ... ... | ... | ... | ... | ... |
| Scarlatina ... ... ... ... ... | ... | ... | ... | ... |
| Diphtheria ... ... ... ... ... | ... | .. | ... | ... |
| Whooping-cough ... ... ... ... | 5 | 4 | ... | ... |
| "Continued" Fevers — Typhus ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Enteric ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Of other, or doubtful sorts ... | 3 | 3 | ... | ... |
| Diarrhœa and Dysentery ... ... ... | 3 | 4 | ... | ... |
| Cholera ... ... ... ... ... | ... | ... | ... | ... |
| Rheumatic Fever ... ... ... ... | ... | 2 | ... | ... |
| Erysipelas ... ... ... ... ... | ... | 3 | ... | ... |
| Pyæmia ... ... ... ... ... | ... | ... | ... | ... |
| Puerperal Fever ... ... ... ... | ... | ... | ... | ... |
| *Ague* ... ... ... ... ... | ... | 1 | ... | ... |
| *Phthisis* ... ... ... ... ... | 1 | 4 | ... | 2 |
| *Bronchitis, Pneumonia, and Pleurisy* ... ... | 3 | 15 | ... | 4 |
| *Heart-Disease* ... ... ... ... ... | ... | 4 | ... | 1 |
| *Injuries* ... ... ... ... ... | 1 | 15 | ... | 2 |

# URBAN SANITARY DISTRICT OF WORTHING.

Population (1871) 7413. Area in Acres 584.
No. of Houses (1871) 1331.

During the year 1875, the births of 224 children and the deaths of 157 persons were registered. Of the births, 115 were males, and 109 were females; of the deaths, 77 were males and 80 were females. Estimating the population in the middle of the year at 8096, the birth-rate was 27·6 per 1000 and the death-rate was 19·3 per 1000.

It must, however, be remembered that during the year several thousand visitors came to the town, and of these, some are sure to die. Visitors are naturally most numerous from June to September, but the number of inhabitants is calculated from the census returns which are taken in April. To arrive at a correct estimate the actual number of visitors should be known; but for all practical purposes, it is enough to state the death-rate among residents and non-residents separately. In Worthing last year, 19 visitors and 138 residents died, making in all 157 as above. Excluding vistors, the death-rate was 17 per 1000; including visitors, the rate was, as above, 19·3 per 1000.

The mortality was rather higher than in 1874, and this arose chiefly from the number of aged people who died in this period; no fewer than 59 out of the 157 who died were 60 years old and upwards, and of these 40 were over 70 years of age at the time of death.

Fourteen persons, including two visitors died from zymotic diseases, thus giving a rate of 1·7 per 1000; this rate is the same as the average through the Combined District.

There were no deaths from measles, diphtheria, small-pox, or enteric fever.

There was one case of *typhus fever* brought into the town early in the year, but every precaution was taken to prevent any spread; the house was thoroughly disinfected, and the clothes and bedding burnt. No other case was met with.

One man died of *erysipelas*, and three from "doubtful forms of *fever*." In these latter cases, however, nothing of a catching nature could be made out. This group of affections consists of a mixture of disorders not yet well understood, and probably includes several diseases, which will hereafter receive more definite names.

The sixth zymotic case was one of *scarlet fever*, which occurred in a cottage in Norfolk Road. There lived here the father, mother, grandfather, and four children. The baby, a year old, had a convulsion on June 13th, and the rash of scarlet fever appeared the next evening; she died of *pneumonia* on June 16th. No other inmates

suffered, although the other three children had not had the fever. These three children were kept away from school, and no further spread occurred. It is very doubtful how this illness was caught, but isolated cases of scarlet fever appear every now and then, and it is often impossible to trace their origin. If one or more members of a private family have the fever and recover, nothing is heard about it and the disorder is constantly spread by the children being sent away before all danger of infection is passed, or else sufficient care is not taken about the washing of clothes.

I think that, besides this single case, there were two other deaths from scarlet fever; these occurred in a well-built and clean house, occupied by a tradesman with his wife and five children. A boy, aged seven years, was taken ill on April 15th, and the rash appeared on the 16th; he had never had the disease before. At this time the attack was mild and he soon recovered. A week after, on April 22nd, a brother, two years old, and a sister, three years old, were taken ill; the boy soon recovered, but the girl died on May 15th with acute renal disease and convulsions. Another sister, four years old, was taken ill on April 29th, and died of exhaustion on May 22nd. None had had the disorder before. The parents and the baby, nine months old, escaped. As a general rule, infants escape catching scarlet fever when other inmates suffer. The boys had only mild attacks, but the girls suffered from a malignant form of the fever and died. The first boy went to a different school to the rest, but there was no known case of fever at either school. The clothes were disinfected and washed at home, the rooms lime-washed, and no other case of the fever occurred in the neighbourhood.

At Worthing there is an iron hospital for infectious diseases, but many people have a strong objection to use it, and there are no compulsory powers to enforce its use. The building is nicely adapted for the purpose, and might be found very convenient in preventing the spread of a contagious disorder. It was once used last year by a young man who had scarlet fever in a lodging-house, and no other case occurred in the house, although many children were there at the time.

*Diarrhœa* caused eight deaths; of these, one was a male over 70 years of age, while the remaining seven were infants under one year of age. Six out of these seven died in August and September, when the weather was extremely warm. There seemed no insanitary conditions to account for the illness, beyond the fact that the children were delicate and suffered from the heat.

Seventeen persons died from *consumption*, among whom were three visitors. The mild climate of Worthing attracts many persons there suffering from chest disorders. The causes of death will be seen if the accompanying tables are examined.

Amongst the pauper population, the health was very good. There was no case of sickness or death from any of the common catching disorders, and there were no deaths from diarrhœa among the 25 who were attacked.

The numbers in the accompanying table include 1048 patients who

attended Worthing Infirmary; of these, there were 27 in-patients and 1021 out-patients; most of the latter, however, suffered from trivial disorders.

The area of this Urban District was increased by the addition of a further portion of the parish of Broadwater in the course of the autumn; the resident population, therefore, of Worthing in the middle of 1876, will be about 8800. This new portion has already been partly supplied with water from the water-works, and measures are now being taken to drain the new area, which at present is in a most unsatisfactory condition. This arose from the fact that at different times people have built houses just outside the local area to avoid the rates. These houses, having nowhere to drain to, are provided with cesspits which are constantly becoming full and pollute any adjacent surface wells: the nuisance, of course, increases every year. To remedy this state of things at Newland Road, the district is now under the care of the Urban Sanitary Authority.

URBAN SANITARY DISTRICT OF WORTHING. TABLE XI.—Showing the *Causes of Death* in the Year 1875.

| NAMES OF DISEASES. | SEX. | | AGE. | |
|---|---|---|---|---|
| | Male. | Female. | Aged under 5. | Aged 5 and upwards. |
| ALL DISEASES AND INJURIES ... ... ... | 77 | 80 | 46 | 111 |
| Small-pox — With marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Without marks of vaccination ... .. | ... | ... | ... | ... |
| Small-pox — Where vaccination not known or doubtful | ... | ... | ... | ... |
| Measles ... ... ... ... ... | ... | ... | ... | ... |
| Scarlatina ... ... ... ... ... | ... | 1 | 1 | ... |
| Diphtheria ... ... ... ... ... | ... | ... | ... | ... |
| Whooping-cough ... ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Typhus ... ... ... | 1 | ... | ... | 1 |
| "Continued" Fevers — Enteric ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Of other, or doubtful sorts ... | 3 | ... | 2 | 1 |
| Diarrhœa and Dysentery ... ... ... ... | 4 | 4 | 7 | 1 |
| Cholera ... ... ... ... ... | ... | ... | ... | ... |
| Rheumatic Fever ... ... ... ... | ... | ... | ... | ... |
| Erysipelas ... ... ... ... ... | 1 | ... | ... | 1 |
| Pyæmia ... ... ... ... ... | ... | ... | ... | ... |
| Puerperal Fever ... ... ... ... | ... | ... | ... | ... |
| *Ague* ... ... ... ... ... ... | ... | ... | ... | ... |
| *Phthisis* ... ... ... ... ... | 8 | 9 | ... | 17 |
| *Bronchitis, Pneumonia, and Pleurisy* ... ... | 11 | 15 | 6 | 20 |
| *Heart-Disease* ... ... ... ... ... | 3 | 10 | ... | 13 |
| *Injuries* ... ... ... ... ... | 2 | 2 | 1 | 3 |

URBAN SANITARY DISTRICT OF WORTHING. TABLE XII.—Return of *Sickness* and *Deaths* during the Year 1875.

| NAMES OF DISEASES. | NEW CASES of Sickness and Deaths among Paupers (both in-door and out-door) belonging to the District, and among other Persons belonging to the District who may be (in- or out-) Patients of any Hospital or Dispensary or other Public Medical Institution, whether within or without the District. | | | |
|---|---|---|---|---|
| | SICKNESS. | | DEATHS. | |
| | Aged under 5. | Aged 5 and upwards. | Aged under 5. | Aged 5 and upwards. |
| | I. | II. | III. | IV. |
| ALL DISEASES AND INJURIES ... ... ... | 114* | 1177* | 1 | 7 |
| Small-pox — With marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Without marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Where vaccination not known or doubtful | ... | ... | ... | ... |
| Measles ... ... ... ... ... | ... | ... | ... | ... |
| Scarlatina ... ... ... ... ... | ... | ... | ... | ... |
| Diphtheria ... ... ... ... ... | ... | ... | ... | ... |
| Whooping-cough ... ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Typhus ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Enteric ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Of other, or doubtful sorts ... | ... | 1 | ... | ... |
| Diarrhœa and Dysentery... ... ... ... | 12 | 23 | ... | ... |
| Cholera ... ... ... ... ... | ... | ... | ... | ... |
| Rheumatic Fever ... ... ... ... | ... | ... | ... | ... |
| Erysipelas ... ... ... ... ... | ... | 5 | ... | 1 |
| Pyæmia ... ... ... ... ... | ... | ... | ... | ... |
| Puerperal Fever ... ... ... ... | ... | ... | ... | ... |
| *Ague* ... ... ... ... ... ... | ... | ... | ... | ... |
| *Phthisis* ... ... ... ... ... | ... | 22 | ... | 1 |
| *Bronchitis, Pneumonia, and Pleurisy* ... ... | 4 | 18 | ... | 1 |
| *Heart-Disease* ... ... ... ... ... | ... | 5 | ... | 2 |
| *Injuries* ... ... ... ... ... | 2 | 38 | ... | ... |

* Including 1048 new cases of sickness attending Worthing Infirmary; 76 under five years; 972 aged five years and upwards.

# URBAN SANITARY DISTRICT OF LITTLEHAMPTON.

Population (1871) 3272. Area in Acres 1222.
No. of Houses (1871) 625.

During the year 1875, the births of 112 children and the deaths of 51 persons were registered; of the births, 53 were males and 59 were females; of the deaths, 30 were males and 21 were females. Estimating the population in the middle of the year at 3664, the birth-rate is 33·3 per 1000, and the death-rate is nearly 14 per 1000. The 51 deaths, however, included those of four visitors; excluding these, the death-rate is 12·8 per 1000.

Of the four visitors, one male died of *lung disease*, 39 years of age; one male, aged 56 years, of *liver disease*; one woman, aged 50 years, committed *suicide*; and one girl, three years of age, died of *consumption*.

Six died from zymotic disorders, giving a rate of 1·6 per 1000; of these, one died from *scarlet fever*; one from *diarrhœa*; three from *diphtheria*; and one from a doubtful form of *fever*.

The case of *fever* was not one of a catching nature.

*Diphtheria*.—One child, two years of age, died of diphtheria in June; he slept in the same room with his parents. In one angle of the room and surounded by a wooden case was a waste-pipe from a closet overhead; at various times a noxious smell was noticed, and the parents themselves had felt poorly and had had headache and nausea, which they ascribed to this cause. The little boy, however, seemed to suffer more severely; his throat was swollen and inflamed and he died in 18 days from exhaustion. On examination, the waste-pipe was found to be cracked and allowed sewer gas to enter the bedroom; this was at once remedied and the room disinfected and lime-washed. No other cases occured since, nor were there any at that time in the neighbourhood; there were, however, a few other cases in the district, but many miles distant. But if this case be ascribed to the influence of sewer gas, this could not be done in the other two cases; one boy, aged four years, died in February, and another boy, two years old, died in March from this disorder. There were no other cases near, and the sanitary condition of these houses was good. It seems very probable that more than one disease is classed under the head of diphtheria. Cold and damp seem to be the two conditions most favouring the development of the disorder, and bad drainage will, no doubt, aggravate, if it does not cause, the complaint.

A few cases of *scarlet fever* were met with during the year, and one child died from this cause; in each case the disease was brought into the district.

1. As scarlet fever had broken out in a village a few miles distant, the children of one of the chief inhabitants were sent down to Littlehampton to avoid infection. Nevertheless they fell ill during their stay, and all recovered. The lodgings were, I believe, disinfected by burning sulphur, and the clothing was also soaked in chloride of lime solution or in Condy's fluid. No other cases occurred. It was only after convalescence that I could obtain any information about them.

2. A few months after, some more children were sent from Croydon to Littlehampton. It appears that one child having fallen ill at Croydon with scarlet fever, the rest were at once sent away, although at the time they were incubating the disorder. A few days after their arrival in this district the children fell ill, but very little information could be obtained. All recovered, the house was thoroughly cleansed and disinfected, and no other cases were met with.

3. In another terrace lived a man with his wife and three children; they went away on October 18th, and returned to their home on October 26th. On October 28th a little girl, aged six years, was taken ill with scarlet fever, and recovered; her brother, three years and six months old, fell ill on November 8th, and died from the effects of diarrhœa on November 21st; he was buried on November 23rd. The father was attacked on November 1st, and recovered.

At this time there were no other cases of scarlet fever in the district, so it is most probable that the disorder was caught when the family were away from home. The father went to Newhaven, the mother and children to Southwick, a place many miles distant. The father was attacked four days, and the boy 11 days, after the girl.

Isolation was carried out as far as possible, and all the washing was done at home. No other cases occurred.

The mother had had scarlet fever when a child, but the remaining four inmates had never had it; of these four, three were now attacked and one, a boy, seven years of age, escaped,

Seventy-one paupers were taken ill; of these, two had *diarrhœa* and one had *erysipelas*; no case in this class died from any of the catching disorders, nor did any fever cases occur amongst them.

Littlehampton forms a small Urban District in the Union of East Preston. The healthiness of this area as well as that of the Union in which it is situated consists chiefly in the absence of any overcrowding; in its sheltered situation, north and north-east winds being kept back by the South Downs; in the isolated position of most of the cottages,which materially helps to prevent any spread of a fever; and in the prevalence for the greater part of the year of a south-west wind, which, blowing across the ocean, can carry with it few elements of pollution.

The question of water-supply and drainage has for many years engaged the attention of the Local Board: a more ample supply of water is needed, as at present ordinary wells have to depended upon; such a supply would add much to the convenience, if not to the health, of the inhabitants. Steps are now being taken to provide water works and to obtain water from the chalk; this, being done, a more efficient system of drainage could then be carried out.

URBAN SANITARY DISTRICT OF LITTLEHAMPTON. TABLE XIII.—Showing the *Causes of Death* in the Year 1875.

| NAMES OF DISEASES. | SEX. | | AGE. | |
|---|---|---|---|---|
| | Male. | Female. | Aged under 5. | Aged 5 and upwards. |
| ALL DISEASES AND INJURIES ... ... ... | 30 | 21 | 12 | 39 |
| Small-pox — With marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Without marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Where vaccination not known or doubtful | ... | ... | ... | ... |
| Measles ... ... ... ... ... | ... | ... | ... | ... |
| Scarlatina ... ... ... ... ... | 1 | ... | 1 | ... |
| Diphtheria ... ... ... ... ... | 3 | ... | 3 | ... |
| Whooping-cough ... ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Typhus ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Enteric ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Of other, or doubtful sorts ... | 1 | ... | ... | 1 |
| Diarrhœa and Dysentery ... ... ... ... | ... | 1 | 1 | ... |
| Cholera ... ... ... ... ... | ... | ... | ... | ... |
| Rheumatic Fever ... ... ... ... | ... | ... | ... | ... |
| Erysipelas ... ... ... ... ... | ... | ... | ... | ... |
| Pyæmia ... ... ... ... ... | ... | ... | ... | ... |
| Puerperal Fever ... ... ... ... | ... | ... | ... | ... |
| *Ague* ... ... ... ... ... ... | ... | ... | ... | ... |
| *Phthisis* ... ... ... ... ... | 3 | 4 | ... | 7 |
| *Bronchitis, Pneumonia, and Pleurisy* ... ... | 4 | 7 | 4 | 7 |
| *Heart-Disease* ... ... ... ... ... | 4 | ... | ... | 4 |
| *Injuries* ... ... ... ... ... | 3 | ... | ... | 3 |

URBAN SANITARY DISTRICT OF LITTLEHAMPTON. TABLE XIV.—Return of *Sickness* and *Deaths* during the Year 1875.

| NAMES OF DISEASES. | NEW CASES of Sickness and Deaths among Paupers (both in-door and out-door) belonging to the District, and among other Persons belonging to the District who may be (in- or out-) Patients of any Hospital or Dispensary or other Public Medical Institution, whether within or without the District. | | | |
|---|---|---|---|---|
| | SICKNESS. | | DEATHS. | |
| | Aged under 5. | Aged 5 and upwards. | Aged under 5. | Aged 5 and upwards. |
| | I. | II. | III. | IV. |
| ALL DISEASES AND INJURIES ... ... ... | 7 | 64 | ... | ... |
| Small-pox — With marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Without marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Where vaccination not known or doubtful | ... | ... | ... | ... |
| Measles ... ... ... ... ... | ... | ... | ... | ... |
| Scarlatina ... ... ... ... ... | ... | ... | ... | ... |
| Diphtheria ... ... ... ... ... | ... | ... | ... | ... |
| Whooping-cough ... ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Typhus ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Enteric ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Of other, or doubtful sorts ... | ... | ... | ... | ... |
| Diarrhœa and Dysentery ... ... ... | ... | 2 | ... | ... |
| Cholera ... ... ... ... ... | ... | ... | ... | ... |
| Rheumatic Fever ... ... ... ... | ... | ... | ... | ... |
| Erysipelas ... ... ... ... ... | ... | 1 | ... | ... |
| Pyæmia ... ... ... ... ... | ... | ... | ... | ... |
| Puerperal Fever ... ... ... ... | ... | ... | ... | ... |
| *Ague* ... ... ... ... ... | ... | ... | ... | ... |
| *Phthisis* ... ... ... ... ... | ... | 2 | ... | ... |
| *Bronchitis, Pneumonia, and Pleurisy* ... ... | ... | 1 | ... | ... |
| *Heart-Disease* ... ... ... ... ... | ... | ... | ... | ... |
| *Injuries* ... ... ... ... ... | ... | 2 | ... | ... |

# URBAN SANITARY DISTRICT OF WEST WORTHING.

Population (1871) 427. Area in Acres 300.
No. of Houses (1871) 66.

During the year 1875, the births of nine children and the deaths of six persons were registered; of the births, one was male and eight were female; of the deaths, all were female. Estimating the population in the middle of the year at 526, the birth-rate is 17 per 1000, and the death-rate is 11·4 per 1000.

There were no deaths from any of the catching disorders.

This district is in the parish of Heene in the East Preston Union, and consists of several new terraces erected within the last few years, on a small estate near the sea. Although adjoining Worthing it has separate drainage and water works.

There are no paupers within the district, and those in Heene parish are entered under the head of East Preston District.

The deaths are so few that a separate table is not required. Of the six females who died, two had *disease of the heart*, one of the *liver*, and one of the *brain*; one died from *consumption*; and one in *child-birth*. All were over five years of age.

# SUMMARY.

The two following Tables give the causes of death and the causes of sickness and deaths among those who have received medical relief in the whole Combined Sanitary District.

The form of the Tables, as in the preceding ones, is that used by the Local Government Board in compiling their quarterly returns.

COMBINED SANITARY DISTRICT. TABLE XV.—Showing the *Causes of Death* in the Year 1875.

| NAMES OF DISEASES. | SEX. | | AGE. | |
|---|---|---|---|---|
| | Male. | Female. | Aged under 5. | Aged 5 and upwards. |
| ALL DISEASES AND INJURIES ... ... ... | 664 | 623 | 366 | 921 |
| Small-pox { With marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox { Without marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox { Where vaccination not known or doubtful | ... | ... | ... | ... |
| Measles ... ... ... ... ... | ... | ... | ... | ... |
| Scarlatina ... ... ... ... ... | 4 | 10 | 6 | 8 |
| Diphtheria ... ... ... ... ... | 14 | 15 | 17 | 12 |
| Whooping-cough ... ... ... ... | 11 | 12 | 22 | 1 |
| "Continued" Fevers { Typhus ... ... ... | 1 | ... | ... | 1 |
| "Continued" Fevers { Enteric ... ... ... | 3 | 5 | 2 | 6 |
| "Continued" Fevers { Of other, or doubtful sorts ... | 8 | 4 | 2 | 10 |
| Diarrhœa and Dysentery ... ... ... ... | 18 | 20 | 28 | 10 |
| Cholera ... ... ... ... ... | ... | ... | ... | ... |
| Rheumatic Fever ... ... ... ... | ... | ... | ... | ... |
| Erysipelas ... ... ... ... ... | 4 | 4 | 1 | 7 |
| Pyæmia ... ... ... ... ... | ... | ... | ... | ... |
| Puerperal Fever ... ... ... ... | ... | ... | ... | ... |
| *Ague* ... ... ... ... ... ... | ... | ... | ... | ... |
| *Phthisis* ... ... ... ... ... | 59 | 68 | ... | 127 |
| *Bronchitis, Pneumonia, and Pleurisy* ... ... | 125 | 121 | 90 | 156 |
| *Heart-Disease* ... ... ... ... | 55 | 69 | ... | 124 |
| *Injuries* ... ... ... ... ... | 29 | 11 | 6 | 34 |

COMBINED SANITARY DISTRICT. TABLE XVI.—Return of *Sickness* and *Deaths* during the Year 1875.

| NAMES OF DISEASES. | NEW CASES of Sickness and Deaths among Paupers (both in-door and out-door) belonging to the District, and among other Persons belonging to the District who may be (in- or out-) Patients of any Hospital or Dispensary or other Public Medical Institution, whether within or without the District. | | | |
|---|---|---|---|---|
| | SICKNESS. | | DEATHS. | |
| | Aged under 5. | Aged 5 and upwards. | Aged under 5. | Aged 5 and upwards. |
| | I. | II. | III. | IV. |
| ALL DISEASES AND INJURIES ... ... ... | 638 | 4094 | 22 | 130 |
| Small-pox — With marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Without marks of vaccination ... ... | ... | ... | ... | ... |
| Small-pox — Where vaccination not known or doubtful | ... | ... | ... | ... |
| Measles ... ... ... ... ... | ... | 3 | ... | ... |
| Scarlatina ... ... ... ... ... | 9 | 20 | 1 | ... |
| Diphtheria ... ... ... ... ... | 10 | 22 | 4 | 4 |
| Whooping-cough ... ... ... ... | 96 | 83 | 1 | ... |
| "Continued" Fevers — Typhus ... ... ... | ... | ... | ... | ... |
| "Continued" Fevers — Enteric ... ... ... | 3 | 11 | ... | 1 |
| "Continued" Fevers — Of other, or doubtful sorts ... | 4 | 19 | ... | ... |
| Diarrhœa and Dysentery... ... ... ... | 83 | 195 | ... | 4 |
| Cholera ... ... ... ... ... | ... | ... | ... | ... |
| Rheumatic Fever ... ... ... ... | ... | 6 | ... | ... |
| Erysipelas ... ... ... ... ... | 1 | 29 | ... | 1 |
| Pyæmia ... ... ... ... ... | ... | 1 | ... | ... |
| Puerperal Fever ... ... ... ... | ... | ... | ... | ... |
| *Ague* ... ... ... ... ... ... | ... | 7 | ... | ... |
| *Phthisis* ... ... ... ... ... | 1 | 67 | 1 | 12 |
| *Bronchitis, Pneumonia, and Pleurisy* ... ... | 52 | 174 | 4 | 24 |
| *Heart-Disease* ... ... ... ... ... | 1 | 36 | ... | 8 |
| *Injuries* ... ... ... ... ... | 8 | 147 | ... | 5 |

TABLE XVII.—Showing the *Causes of Death* of 1287 persons in the Combined Sanitary District.

| CAUSE OF DEATH. | Steyning R. S. A. | | Horsham R. S. A. | | Petworth R. S. A. | | Thakeham R. S. A. | | East Preston R. S. A. | | Worthing U. S. A. | | Littlehampton U. S. A. | | West Worthing U. S. A. | | Total. | | Total both Sexes. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | |
| All causes ... ... ... | 107 | 123 | 185 | 169 | 94 | 84 | 94 | 75 | 77 | 65 | 77 | 80 | 30 | 21 | ... | 6 | 664 | 623 | 1287 |
| Zymotic diseases ... ... ... | 12 | 15 | 18 | 29 | 4 | 6 | 12 | 10 | 3 | 4 | 9 | 5 | 5 | 1 | ... | ... | 63 | 70 | 133 |
| Dropsy ... ... ... ... | 2 | 1 | ... | ... | 3 | ... | ... | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | 5 | 3 | 8 |
| Cancer ... ... ... ... | 2 | 4 | 4 | 2 | ... | 4 | 4 | 2 | 2 | 2 | ... | 3 | 2 | ... | ... | ... | 14 | 17 | 31 |
| Gangrene ... ... ... | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 2 | 1 | 3 |
| Rheumatism ... ... ... | ... | 1 | 4 | ... | ... | ... | 1 | 1 | ... | 1 | 1 | 1 | ... | ... | ... | ... | 6 | 4 | 10 |
| Pyæmia ... ... ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 2 | 1 | 3 |
| Leucocythæmia ... ... ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 |
| Diabetes ... ... ... | 1 | 1 | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 1 | 4 |
| Delirium Tremens ... ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | 2 | ... | 2 |
| Abscess, Inflammation, &c. ... | ... | ... | ... | 1 | ... | ... | 1 | ... | 1 | ... | 1 | 1 | ... | ... | ... | ... | 3 | 2 | 5 |
| Phthisis ... ... ... | 9 | 11 | 20 | 19 | 10 | 9 | 1 | 5 | 8 | 10 | 8 | 9 | 3 | 4 | ... | 1 | 59 | 68 | 127 |
| Scrofulous Diseases ... ... | ... | 3 | ... | 2 | 2 | 2 | 2 | 1 | ... | 1 | 2 | ... | ... | ... | ... | ... | 6 | 9 | 15 |
| Hydrocephalus ... ... ... | ... | ... | 2 | ... | 2 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 4 | 1 | 5 |
| Diseases of Brain ... ... | 15 | 10 | 27 | 20 | 17 | 11 | 8 | 8 | 8 | 9 | 13 | 12 | 1 | 1 | ... | 1 | 89 | 72 | 161 |
| ,, Organs of Circulation ... | 8 | 16 | 9 | 16 | 14 | 9 | 8 | 7 | 9 | 9 | 3 | 10 | 4 | .. | ... | 2 | 55 | 69 | 124 |
| ,, Respiratory Organs ... | 18 | 33 | 45 | 28 | 13 | 15 | 21 | 19 | 13 | 4 | 11 | 15 | 4 | 7 | ... | ... | 125 | 121 | 246 |
| ,, Digestive ,, ... | 3 | 4 | 11 | 11 | 2 | 6 | 3 | 6 | 2 | 5 | 6 | 8 | 2 | 1 | ... | 1 | 29 | 42 | 71 |
| ,, Urinary ,, ... | 2 | ... | 2 | 1 | 4 | ... | 5 | ... | 2 | 1 | 4 | ... | 2 | ... | ... | ... | 21 | 2 | 23 |
| ,, Uterine ,, ... | ... | 1 | ... | 4 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 6 | 6 |
| ,, Child-birth ,, ... | ... | 2 | ... | 2 | ... | ... | ... | ... | ... | 1 | ... | 2 | ... | 2 | ... | 1 | ... | 10 | 10 |
| Congenital Debility and Atrophy ... | 9 | 6 | 14 | 6 | 3 | 5 | 5 | ... | 4 | 4 | 5 | 6 | 1 | 1 | ... | ... | 41 | 28 | 69 |
| Premature Birth ... ... ... | 6 | 2 | 6 | 11 | 4 | 3 | 4 | 1 | 3 | 1 | 3 | 1 | ... | ... | ... | ... | 26 | 19 | 45 |
| Old Age ... ... ... | 11 | 5 | 9 | 14 | 9 | 7 | 9 | 13 | 16 | 10 | 4 | 3 | 2 | 3 | ... | ... | 60 | 55 | 115 |
| Accidents ... ... ... | 6 | 3 | 10 | 1 | 3 | 3 | 4 | .. | 1 | 2 | 2 | 2 | 3 | ... | ... | ... | 29 | 11 | 40 |
| Suicide ... ... ... ... | 1 | 1 | 3 | ... | 2 | ... | ... | ... | 3 | ... | ... | ... | ... | 1 | ... | ... | 9 | 2 | 11 |
| Unknown ... ... ... | 1 | 3 | 1 | 1 | 1 | 3 | 4 | 1 | 1 | ... | 3 | ... | .. | ... | ... | ... | 11 | 8 | 19 |
| Total ... | 107 | 123 | 185 | 169 | 94 | 84 | 94 | 75 | 77 | 65 | 77 | 80 | 30 | 21 | ... | 6 | 664 | 623 | 1287 |

TABLE XVIII.—Showing the *Ages at Death* of 1287 persons in the Combined Sanitary District.

| NAME OF SANITARY AUTHORITY. | | Total. | Under 1. | -2 | -5 | -10 | -15 | -20 | -30 | -40 | -50 | -60 | -70 | -80 | -90 | -100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Steyning Rural ... ... | M. | 107 | 38 | 2 | 2 | ... | 3 | 3 | 6 | 4 | 7 | 1 | 14 | 12 | 13 | 2 |
| | F. | 123 | 26 | 5 | 2 | 6 | 1 | 6 | 5 | 9 | 5 | 10 | 24 | 12 | 12 | ... |
| Horsham ditto ... ... | M. | 185 | 36 | 8 | 16 | 8 | 4 | 2 | 9 | 15 | 8 | 20 | 18 | 21 | 17 | 3 |
| | F. | 169 | 28 | 7 | 10 | 13 | 3 | 5 | 12 | 7 | 14 | 17 | 14 | 25 | 12 | 2 |
| Petworth ditto ... ... | M. | 94 | 12 | 4 | 3 | 2 | 2 | 2 | 2 | 3 | 7 | 7 | 15 | 22 | 11 | 2 |
| | F. | 84 | 14 | 5 | 5 | 3 | 4 | 4 | 6 | 3 | 5 | 6 | 8 | 14 | 6 | 1 |
| Thakeham ditto ... ... | M. | 94 | 19 | 6 | 8 | 2 | 1 | 2 | 5 | 2 | 5 | 9 | 13 | 13 | 9 | ... |
| | F. | 75 | 8 | 6 | 8 | 1 | ... | 3 | 2 | 2 | 4 | 5 | 12 | 13 | 10 | 1 |
| East Preston ditto ... | M. | 77 | 14 | 3 | 1 | 4 | ... | 4 | 4 | 3 | 6 | 9 | 8 | 13 | 7 | 1 |
| | F. | 65 | 6 | ... | 6 | 2 | 3 | 1 | 4 | 10 | 5 | 6 | 7 | 2 | 11 | 2 |
| Worthing Urban ... ... | M. | 77 | 20 | 4 | 4 | 2 | ... | 3 | 5 | 4 | 8 | 5 | 6 | 12 | 3 | 1 |
| | F. | 80 | 11 | 5 | 2 | 1 | ... | 1 | 2 | 7 | 9 | 5 | 13 | 20 | 4 | ... |
| Littlehampton ditto ... | M. | 30 | 2 | 1 | 3 | ... | ... | 1 | 1 | 3 | 6 | 6 | 3 | 2 | 2 | ... |
| | F. | 21 | 2 | 3 | 1 | 1 | 1 | ... | 1 | 2 | 2 | 3 | 1 | 3 | 1 | ... |
| West Worthing ditto ... | M. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | F. | 6 | ... | ... | ... | ... | ... | ... | 1 | 2 | ... | 2 | 1 | ... | ... | ... |
| Total ... ... | M. | 664 | 141 | 28 | 37 | 18 | 10 | 17 | 32 | 34 | 47 | 57 | 77 | 95 | 62 | 9 |
| | F. | 623 | 95 | 31 | 34 | 27 | 12 | 20 | 33 | 42 | 44 | 54 | 80 | 89 | 56 | 6 |
| Total both Sexes ... | | 1287 | 236 | 59 | 71 | 45 | 22 | 37 | 65 | 76 | 91 | 111 | 157 | 184 | 118 | 15 |

366 died under five years of age (206 males and 160 females); 447 died between five and 60 years (215 males and 232 females); 474 died 60 years of age and upwards (243 males and 231 females).

TABLE XIX.—Showing the *Deaths from Zymotic Disorders* in the Year 1875.

| Name of Sanitary Authority. | Small-pox. | Measles. | Scarlet Fever. | Diptheria. | Whooping-cough. | "Continued" Fevers. | | | Diarrhœa. | Cholera. | Erysipelas. | Total. | Zymotic Death-rate to 1000 of Population. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Typhus Fever. | Enteric Fever. | Of other or doubtful sorts. | | | | | |
| | M. F. | M. F. | M. F. | M. F. | M. F. | M. F. | M. F. | M. F. | M. F. | M. F. | M. F. | | |
| Steyning Rural ... | ... | ... | ... | 3 2 | 3 4 | ... | 1 1 | 1 1 | 4 4 | ... | ... 3 | 27 | 1·7 |
| Horsham ditto ... | ... | ... | 2 8 | 5 9 | 1 2 | ... | 2 3 | 3 3 | 2 4 | ... | 3 ... | 47 | 2·3 |
| Petworth ditto ... | ... | ... | ... 1 | 3 2 | ... 2 | ... | ... | ... | 1 ... | ... | ... 1 | 10 | 1·0 |
| Thakeham ditto ... | ... | ... | 1 ... | ... 2 | 6 4 | ... | ... | ... | 5 4 | ... | ... | 22 | 2·5 |
| East Preston ditto ... | ... | ... | ... | ... | 1 ... | ... | ... 1 | ... | 2 3 | ... | ... | 7 | ·8 |
| Worthing Urban ... | ... | ... | ... 1 | ... | ... | 1 ... | ... | 3 ... | 4 4 | ... | 1 ... | 14 | 1·7 |
| Littlehampton ditto... | ... | ... | 1 ... | 3 ... | ... | ... | ... | 1 ... | ... 1 | ... | ... | 6 | 1·6 |
| West Worthing ditto | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Total ... | ... | ... | 4 10 | 14 15 | 11 12 | 1 ... | 3 5 | 8 4 | 18 20 | ... | 4 4 | 133 | 1·7 |

TABLE XX.—Showing the *Births* in each District.

| NAME OF SANITARY AUTHORITY. | First Quarter. | | | Second Quarter. | | | Third Quarter. | | | Fourth Quarter. | | | Year. | | | Birth-rate per 1000 of Population. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M. | F. | Total. | M. | F. | Total. | M. | F. | Total. | M. | F. | Total. | M. | F. | Total. | |
| Steyning Rural ... | 63 | 49 | 112 | 53 | 51 | 104 | 61 | 45 | 106 | 58 | 58 | 116 | 235 | 203 | 438 | 28·6 |
| Horsham ditto ... | 74 | 76 | 150 | 76 | 84 | 160 | 95 | 72 | 167 | 76 | 69 | 145 | 321 | 301 | 622 | 31·0 |
| Petworth ditto ... | 46 | 34 | 80 | 36 | 38 | 74 | 46 | 34 | 80 | 45 | 44 | 89 | 173 | 150 | 323 | 31·0 |
| Thakeham ditto ... | 29 | 44 | 73 | 43 | 33 | 76 | 25 | 28 | 53 | 31 | 27 | 58 | 128 | 132 | 260 | 30·0 |
| East Preston ditto ... | 33 | 35 | 68 | 28 | 21 | 49 | 32 | 28 | 60 | 19 | 18 | 37 | 112 | 102 | 214 | 26·4 |
| Worthing Urban ... | 18 | 27 | 45 | 36 | 22 | 58 | 26 | 22 | 48 | 35 | 38 | 73 | 115 | 109 | 224 | 27·6 |
| Littlehampton ditto... | 12 | 16 | 28 | 11 | 11 | 22 | 13 | 18 | 31 | 17 | 14 | 31 | 53 | 59 | 112 | 30·0 |
| West Worthing ditto | ... | 2 | 2 | ... | 2 | 2 | ... | 1 | 1 | 1 | 3 | 4 | 1 | 8 | 9 | 17·0 |
| Total ... | 275 | 283 | 558 | 283 | 262 | 545 | 298 | 248 | 546 | 282 | 271 | 553 | 1138 | 1064 | 2202 | 29·6 |

TABLE XXI.—Showing the *Accidental Deaths* in the Year 1875.

| CAUSE OF DEATH. | Steyning. | Horsham. | Petworth. | Thakeham. | East Preston. | Worthing. | Littlehampton. | West Worthing. | Total. | Total both Sexes. |
|---|---|---|---|---|---|---|---|---|---|---|
| | M. F. | M. F. | M. F. | M. F. | M. F. | M. F. | M. F. | M. F. | M. F. | |
| By Drowning ... ... ... | 3 ... | 1 ... | ... | ... | ... | ... | 1 ... | .. | 5 ... | 5 |
| Fractures ... ... ... | ... 2 | ... | ... | ... | ... 1 | ... 1 | ... | ... | ... 4 | 4 |
| Choking ... ... ... | ... 1 | 1 ... | ... | ... | ... | ... | ... | ... | 1 1 | 2 |
| Suffocation ... ... ... | 1 ... | ... | ... | ... | ... | ... | ... | ... | 1 ... | 1 |
| Cold and Exposure ... ... | 1 ... | ... | ... | ... | ... | ... | ... | ... | 1 ... | 1 |
| Running over ... ... | ... | 3 ... | ... | 1 ... | 1 ... | 1 1 | ... | ... | 6 1 | 7 |
| Fall, &c. ... ... ... | ... | 3 ... | 1 2 | 2 ... | ... 1 | 1 ... | 2 ... | ... | 9 3 | 12 |
| Burns ... ... ... | ... | 1 ... | ... 1 | ... | ... | ... | ... | ... | 1 1 | 2 |
| Wounds ... ... ... | ... | ... | 1 ... | ... | ... | ... | ... | ... | 1 ... | 1 |
| Shooting ... ... ... | ... | ... | ... | 1 ... | ... | ... | ... | ... | 1 ... | 1 |
| Found Dead ... ... ... | 1 ... | 1 1 | 1 ... | ... | ... | ... | ... | ... | 3 1 | 4 |
| Total ... | 6 3 | 10 1 | 3 3 | 4 ... | 1 2 | 2 2 | 3 ... | ... | 29 11 | 40 |

TABLE XXII.—Showing the *Deaths from Suicide* in the Year 1875.

| CAUSE OF DEATH. | Steyning. | | Horsham. | | Petworth. | | Thakeham. | | East Preston. | | Worthing. | | Littlehampton. | | West Worthing. | | Total. | | Total both Sexes. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | |
| By Strangling with cord ... ... | 1 | ... | ... | | ... | | ... | | ... | | ... | | ... | | ... | | 1 | ... | 1 |
| Drowning ... ... ... | ... | 1 | 1 | ... | 1 | ... | ... | | ... | | ... | | ... | | ... | | 2 | 1 | 3 |
| Shooting ... ... ... | ... | | ... | | 1 | ... | ... | | ... | | ... | | ... | | ... | | 1 | ... | 1 |
| Cutting throat ... ... | ... | | 1 | ... | ... | | ... | | 2 | ... | ... | | 1 | ... | ... | | 3 | 1 | 4 |
| Hanging ... ... ... | ... | | 1 | ... | ... | | ... | | 1 | ... | ... | | ... | | ... | | 2 | ... | 2 |
| Total ... | 1 | 1 | 3 | ... | 2 | ... | ... | | 3 | ... | ... | | 1 | ... | ... | | 9 | 2 | 11 |

# GENERAL REPORT

ON THE

# Health of the Combined Sanitary District of

# West Sussex.

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In the whole of the Combined Sanitary District of West Sussex the births of 2202 children and the deaths of 1287 persons were registered during the year 1875. Of the 2202 births, 1138 were male and 1064 were female; of the deaths, 664 were male and 623 were female.

Taking the population of the district at 74,412 in the middle of the year the birth-rate was 29·6 and the death-rate was 17·3 per 1000 per annum. The birth-rate in the whole of England and Wales during the same period was 34·0 per 1000, so that the rate in West Sussex is below the average. This is the case in all agricultural districts; because in them there is relatively a larger proportion of non-bearing population, owing to the migration of the young and healthy to large towns and manufacturing districts.

| Name of Sanitary Authority. | Population in middle of 1875. | Deaths. | Death-rate per 1000 per annum. |
|---|---|---|---|
| Steyning rural ... | 15,310 | 230 | 15·02 |
| Horsham ditto ... | 19,950 | 354 | 17·74 |
| Petworth ditto ... | 10,170 | 178 | 17·50 |
| Thakeham ditto ... | 8,586 | 169 | 19·68 |
| East Preston ditto ... | 8,110 | 142 | 17·50 |
| Worthing urban ... | 8,096 | 138<br>157* | 17·00<br>19·39* |
| Littlehampton ditto ... | 3,664 | 47<br>51* | 12·80<br>13·92* |
| West Worthing ditto ... | 526 | 6 | 11·40 |
| Total ... | 74,412 | 1,264<br>1,287* | 16.98<br>17·29* |

In each quarter the births were as follows :—

| | M. | F. | Total. |
|---|---|---|---|
| First quarter ... ... | 275 ... | 283 ... | 558 |
| Second ditto ... ... | 283 ... | 262 ... | 545 |
| Third ditto ... ... | 298 ... | 248 ... | 546 |
| Fourth ditto ... ... | 282 ... | 271 ... | 553 |
| | 1138 | 1064 | 2202 |

As usual more males than females were born, but the numbers in each division of the year were very nearly equal.

The death-rate in England and Wales during the year 1875 was 22·2 per 1000. This number, however, includes large towns, where the mortality is always higher than in rural districts. In the chief towns the death-rate was 24·5 per 1000 during the year 1875; in small towns and country parishes for the same period it was only 20·7 per 1000; in West Sussex the rate was 17·3 per 1000. It is obvious that a fair comparison can only be drawn between places of correspond-

* Including visitors.

ing size; in the great centres of population there are elements of risk and danger which raise the mortality while smaller places are not liable to such influences. During the decade 1865–74 the mean rate was 19·3 in rural districts throughout the country, 1·4 less than the rate in 1875. This increase is observable everywhere, and in West Sussex the rate is rather higher than the average of the previous 10 years. It must be noted that among the 1287 who died, there were 23 visitors, so that the actual rate in this district was 16·9 per 1000. Of the 23 visitors, 19 died at Worthing and four at Littlehampton. The population is estimated from the census in April, a time when watering-places are comparatively free from visitors. From July to October the number of people at a seaside resort is greatly increased, and some deaths are sure to occur. If such deaths were included amongst the ordinary population it would make the rate of mortality appear unduly high.

The reason of the increase in mortality during the past year is not due to any epidemic, but to the severe and inclement weather in the opening months of the period. This is easily shown by comparing the deaths which occurred in each quarter:

| | M. | F. | Total. |
|---|---|---|---|
| First quarter ... ... | 217 | 204 | 421 |
| Second ditto ... ... | 160 | 142 | 302 |
| Third ditto ... ... | 124 | 128 | 252 |
| Fourth ditto ... ... | 163 | 149 | 312 |
| | 664 | 623 | 1287 |

In the year 1874 there were 1115 deaths; the excess noticeable in 1875 is due to the high mortality in the quarter ending March 31st.

In these three months 130 persons died of diseases of the lung, such as bronchitis and pneumonia, while the numbers dying from those disorders in the three remaining quarters of the year were respectively 57, 16, and 43. Thus out of a total of 246 deaths from lung affections, 130, or more than one-half, succumbed to the influence of an ungenial climate.

Consumption also proved more fatal during the same period; out of 127 deaths from this cause during the year, 41, or about one-third, occurred within the first three months of 1875.

| | 1st Qr. | 2nd Qr. | 3rd Qr. | 4th Qr. | Total. |
|---|---|---|---|---|---|
| Consumption ... | 41 | 30 | 28 | 28 | 127 |
| Lung diseases ... | 130 | 57 | 16 | 43 | 246 |

Consumption attacks principally those in adult and middle life; it is most fatal between 20 and 40 years of age, and but few die from this cause over 60 years of age. Lung diseases, on the contrary, are most fatal amongst children and aged people, and probably more so in Rural than in Urban districts, as inclement weather is generally felt more severely in the former than in the latter. Of the 127 deaths from consumption, one was under five years of age, 102 between five and 60, and 24 were over 60 years of age. Of the 246 deaths from lung affections, 90 were under five years, 48 were between five and 60, while no fewer than 108 were over 60 years of age. The proportion is more easily seen by calculating the percentage rate. In every 100 deaths from—

| | Under 5 years. | Between 5 and 60. | 60 years and upwards. | Total. |
|---|---|---|---|---|
| Consumption ... | 1 | 80 | 19 | 100 |
| Lung diseases ... | 36 | 20 | 44 | 100 |

In the whole of England and Wales about 24 out of every 10,000 persons die of consumption; in West Sussex about 17 out of every 10,000 die from this cause. The period of a year is too short to be able to give any estimate as to influence of soil or of climate upon the distribution of this disorder, but it seems probable that upon the Weald clay where the rainfall is greater than along the south coast, this affection is rather more common.

The infant mortality is less in West Sussex than the average throughout the country generally.

In England and Wales during the year 1875, 158 infants under one year of age died to every 1000 children born; in this combined district 107 infants died to every 1000 infants born.

In England and Wales during the year 1875, out of every 100 persons dying—

24 were under one year of age
51 „ between one year and 60 years
25 „ over 60 years of age

100

In West Sussex during the same period out of every 100 persons dying there were—

18 under one year of age
45 between one and 60 years
37 over 60 years of age
—
100

These figures show a smaller amount of infant mortality and a considerable prolongation of adult life.

Again, taking those who die under five years of age and comparing them with those who die at more advanced ages, it will be found that people live much longer in this district than in towns or other parts of the kingdom-

In England and Wales, about—

40 per cent. die under five years of age
37 „ between five years and 60 years
23 „ 60 years of age and upwards
—
100

In West Sussex, in 1875, about—

·28 per cent. died under five years of age
35 „ between five years and 60 years
37 „ 60 years of age and upwards
—
100

These figures are nearly the same as those obtained in 1874.

## Zymotic or Catching Disorders.

This term includes those disorders which are commonly looked upon as contagious or infectious. Out of 1287 deaths, 133 were due to this group of diseases, or 1·7 to every 1000 of population. This rate is precisely the same as in 1874, but it is only one-half the amount which prevailed in the year 1875 throughout England and Wales.

Of the 133 deaths, 29 occurred in the first quarter, 34 in the second quarter, 39 in the third quarter, and 31 in the fourth quarter of the year.

| | 1st Qr. | 2nd Qr. | 3rd Qr. | 4th Qr. |
|---|---|---|---|---|
| Scarlet Fever ... | – | 2 | 2 | 10 |
| Whooping-cough ... | 7 | 9 | 3 | 4 |
| Enteric Fever ... | 3 | – | 2 | 3 |
| Fevers of doubtful sorts | 2 | 3 | 3 | 4 |
| Diphtheria ... | 7 | 13 | 6 | 3 |
| Diarrhœa ... | 6 | 3 | 23 | 6 |

The above analysis shows what catching disorders were most prevalent in each quarter.

*Measles* were nearly absent during the year; here and there a mild case was met with, but no fatal result ensued. In 1874 this complaint was very common in some parts of the district.

*Scarlet Fever.*—Fourteen deaths from this disease were registered. The deaths have been most numerous in Horsham, where an outbreak occurred in the last four months of the year.

This disorder existed but slightly in the first half of 1875, and only a few isolated cases were met with; but towards the end of the autumn a great number of children were attacked, although in most instances the outbreak was mild in its character. Only 29 paupers were attacked: of these 20 were in Horsham District, and seven in Thakeham District; the latter cases were limited to a few houses, so that the fever was not widespread.

It is worthy of notice how few among the poorer classes were attacked. It is only amongst this class that, at present, any definite information can be obtained; the slight mortality and the limited spread of the disorder may, in some measure, be due to early knowledge of the infected places and the adoption of simple sanitary measures.

Scarlet Fever is constantly being spread about the country by the carelessness of people, and this is chiefly done by the wealthy and upper classes. Amongst the poor the disease is easily traced out; the children are kept from school and the washing is done at home; the neighbours, afraid of the fever, keep away as much as possible, and so isolation is pretty well secured and the disease does not spread. When

the patients are convalescent the house is cleansed and lime-washed and generally all mischief is at an end.

Very different is the case with the wealthy. It constantly happens that when one child is attacked, the rest are at once sent away. But since these children have been exposed to infection, it results that in a few days the other children fall ill in their new lodgings, one by one, and thus a new centre is formed for the disease to spread from. If, in all cases, such children could be sent to an isolated cottage, not much harm could be done; but when they are sent to lodgings in the very centre of such towns as Worthing and Littlehampton, much danger may be apprehended. The proper way would be in such cases to keep the children at home and by themselves until all danger is past. If they have been exposed to the infection and are incubating the disorder, they will have the disease whether they are sent away or not; if they are not incubating the affection, why should they be sent to another town? The sin is all the greater because such people, having the means, could easily find out some isolated cottage or make some other arrangements if they were less selfish and they would take a little trouble about it.

Another class of offenders are those in charge of schools. It is well known to any one who has the care of boys or girls that at times, however careful they may be, there will occur outbreaks of measles or scarlet fever, and yet very seldom indeed does one find any method adopted to isolate such cases. A boy in a school is found with scarlet fever; the master sends for a medical man, who tells him the danger incurred by the other boys. Fearful of this, the patient is sent away at once, perhaps home, perhaps into lodgings in the heart of a town. Should any spread occur, surely the master is responsible, because he has taken no measures to meet occurrences which he must know are unavoidable. Nor does the evil end here. If the lodgings happen to be in a terrace where other houses are also let for a similar purpose, serious injury is done to the occupiers, who are unable to let their rooms when it is known in the town that "there is fever in the row." The proper plan would be for each schoolmaster to make proper provision for such cases, and if he cannot do so on his own premises, he should make arrangements with a cottager who has no children, and who lives in a lonely spot and who has space to wash everything at home; or two or three masters might combine and have a small cottage or house in common.

*Diphtheria* was found all through the year, small local outbreaks appearing every now and then, but not spreading far beyond the spot where they commenced. It was most prevalent in the first part of the year, and became less so when scarlet fever broke out. There did not seem to be any relation between the two disorders. Thirty-two paupers were attacked, and of these eight died; the most common age was between five and ten years.

*Whooping-cough*, although very common, and causing many deaths, is not looked upon by the public with sufficient importance. Yet there were no less than 23 deaths last year from this cause. This disorder differs from other catching diseases, in that it cannot be communicated except from one infected child directly to another; a third non-affected person cannot carry the disease from child to child. Hence isolation for a time ought to prevent any spread. The poor, however, take very little notice of this disease, and seem to look upon it as a necessary ailment of childhood; a medical man is rarely sent for unless the child has bronchitis or pneumonia, and then it is often too late to do any good. Frequently children with whooping-cough are seen running about, and then if there is a sudden change to cold weather, or if the child be weakly from birth, a fatal result ensues. Nearly all the deaths arose from some lung-mischief following the cough. One hundred and seventy-nine children among the poor had whooping-cough, but only one of these died. It was most common in Petworth Union, then in Horsham, and next in Thakeham Districts; these are chiefly on the Weald clay; along the south coast and over the Downs very few cases were met with.

*Typhus Fever* caused the death of one person in the year. The disease was, however, imported into the district and no other cases were met with.

*Enteric Fever* has already been sufficiently mentioned.

Under the heading of "fever" are included many cases of a doubtful nature. Tubercular meningitis, acute tuberculosis, gastro-bilious fever and pneumonia are often mixed up indiscriminately. There were 12 deaths from this form of "fever" during the year but in none could I make out that there was anything catching or infectious in their nature.

*Diarrhœa.*—This ought to be considered rather as a symptom of disease than as a disease in itself. In childhood it often proceeds from bad feeding or from bad water; it occurs in the course of many disorders and is put down as the cause, when often it is only the most prominent symptom; it is found amongst the children who are most neglected by their parents, and often it proceeds from bad nutrition especially in those who are the subjects of hereditary disease. In old age it seldom proceeds from insanitary conditions, but merely attends the feebleness and exhaustion met with at that time of life.

Of the 38 deaths from this cause, 17 were under one year of age, three between one and two years of age, and eight between two and five years; so that 28, or by far the greater number, died in early childhood. Between 10 years and 40 years, no one died from diarrhœa; four died in old age of the disorder.

Diarrhœa was most prevalent in Thakeham Union there being nine cases this year as against one in 1874; two of the cases were, however, brought into the district.

## Accidental or Violent Deaths.

There were 51 deaths during the year from accidents or violence; of these 40 were accidental and 11 were suicidal. Nine men and two women committed suicide. The method adopted in each case is shown in Table XXII. At the inquests held a verdict of "temporary insanity" was brought in. The number is less than in 1874, but the rate is still higher than the average throughout the country.

In England and Wales three out of every 1000 deaths are suicidal, or there are about 70 suicides to every 1,000,000 persons living.

In West Sussex 8·5 out of every 1000 deaths were suicidal in 1875, or 147 suicides to every 1,000,000 persons living.

Twelve of the accidental deaths proceeded from falls, and in one case a passenger fell from a train; seven persons were run over and of these two were caused by a train, so that there were, in all, three fatal railway accidents; five were drowned, four met with fractured limbs; the other causes of death will be found in Table XXI.

Of the 40 deaths from accidents, six were under five years of age, while 34 were five years old and upwards.

Amongst the pauper population eight children under five years of

age met with accidents, but none of them were fatal; 147 persons over five years of age were injured and in five cases a fatal result ensued.

It will be thus seen that among 4732 paupers who were ill from various causes one out of every 31 met with some kind of accident.

THE END.

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